

# SD Times

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## JCP 2.6 WORKS TOWARD BECOMING MORE VISIBLE

BY YVONNE L. LEE

A year after Sun's Java Community Process began its latest incarnation, the executive committee next month will begin preliminary steps to explore ways to make it better.

Java Community Process 2.6, itself a Java Specification Request (JSR 215), was intended to bring greater transparency, participation and efficiency, said Aaron Williams, manager of the JCP's program management office.

Transparency remains a sticking point because the specification for JCP 2.6 requires that all JSRs have a transparency plan, but does not specify what that transparency plan

should be. So, some outside the community have complained that while some JSRs have become more open, others are less visible. Williams did claim, however that because of the requirement to have some sort of transparency plan, such as a Web-based forum or e-mail list showing the discussions related to a JSR, the group has seen an unspecified increase in the number of comments for each specification.

Williams said the group did not spell out a specific method that each JSR must have, leaving each specification lead to choose the method he or she thinks is best for the specifica-

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## Tightening The Bonds Of Open Source

Novell, JBoss broaden relationship to extend middleware system

BY DAVID RUBINSTEIN

AND YVONNE L. LEE

Novell and JBoss are now tied even more closely together.

At its annual Brain-

Share conference held last month in Salt Lake City, Novell announced it will use the JBoss Enterprise Middleware System



Novell will build its entire portlet library into JBoss Portal 2.0, says JBoss' Bickel.

NOVELL EYES  
LINUX  
CROWN  
PAGE 3

(JEMS) for its application foundation services, and will dedicate engineering resources to help build out the middleware stack.

"We had an agreement with Novell regarding our application server, and this broadens that relationship," said Bob Bickel, JBoss' vice president of strategy and corporate development.

Bickel said Novell uses the term application foundation services as others use service-oriented architecture or middleware stack—to describe middleware and functionality that applications use to talk to databases, or do transactions, or interact with Web services.

Bickel indicated that Novell first will work with JBoss on the open-source portal project, JBoss Portal 2.0. He said Nov-

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## Blueprints for Intelligent Infrastructures

With BI market in billions, vendors come at it from all directions

BY DAVID RUBINSTEIN

Business intelligence has grown from mere data analysis and reporting into something much more—an infrastructure for gathering data, putting it into a form that's usable and presenting it in a number of different ways based on the needs of a particular user.

Depending upon their view of the market, financial and industry analysts say the BI market is between US\$25 billion and \$35 billion, and is expected to take off in the next several years.

Several vendors who come at the market from different places

last month released updates to their business intelligence offerings, each saying BI is moving from a tactical to a strategic place within businesses. They also noted that compliance with federal and industry regulations is an important driver behind the abil-

ity to document compliance.

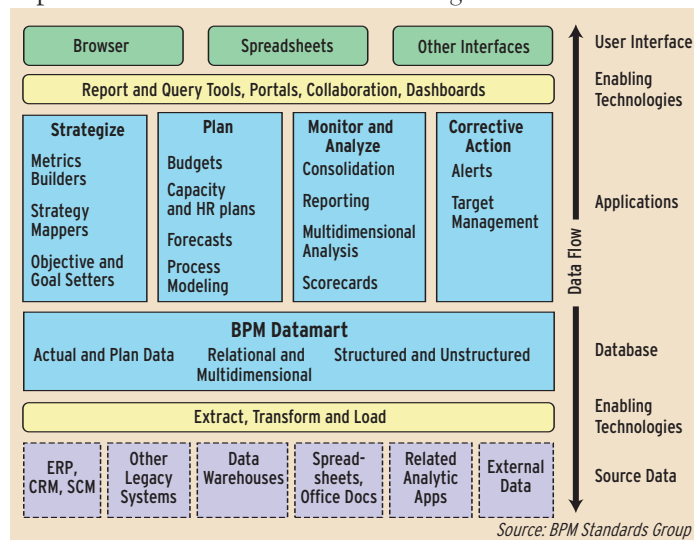
Database giant Oracle released a new stand-alone product called Business Intelligence 10g, tied closely to its database.

"There are features in the Oracle 10g [database] we take advantage of" with the BI tool,

said Steve Illingworth, senior director of business intelligence products at Oracle. As an example, Illingworth said the tight integration with Oracle Portal turns creating BI applications into a line-of-business task, not an IT task.

Also, the BI server uses the extract-transform-load engine embedded inside the Oracle database, so "you don't have to create any temp files, and there's less of a security concern," Illing-

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Source: BPM Standards Group

The BPM Standards Group framework shows how pieces fit together.

**SPECIAL REPORT**  
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# Novell Has Eyes on Linux Crown

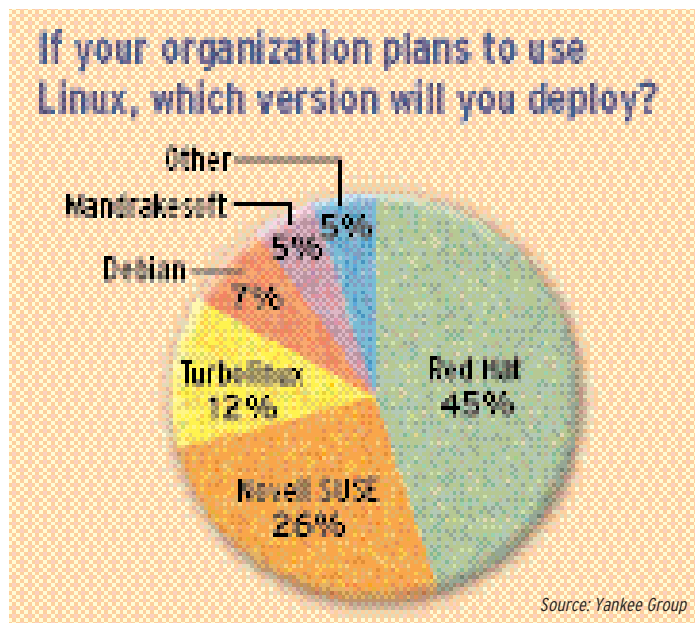
## Couples operating system with network services in bid to topple Red Hat

BY YVONNE L. LEE

Novell in the past year has positioned itself to go from a player in network services to being a dominant provider of Linux services. Last month, that effort was advanced at Novell's annual BrainShare conference when it announced management software, network identity management software and a Linux distribution aimed at small businesses.

Through a series of acquisitions, Novell has become a strong No. 2 player in the Linux market. It hopes that by offering an operating system, it will be able to sell network services, and by selling the network services, it will be able to be more attractive than its competitors in the operating system market.

Novell entered the Linux market in August 2003 by acquiring Ximian, which makes the Gnome Linux desktop and the Mono open-source .NET Framework. It followed up in November of that year with the purchase of SUSE Linux, the No. 2 Linux distribution behind Red Hat, for US\$210 million in cash. At the same time, Novell



received a \$50 million cash investment from IBM.

### BIG BLUE BACKING

Observers say that Novell's relationship with IBM is key to Novell's attempts at becoming the leading enterprise Linux provider.

"Novell partnering with IBM—that's a very powerful partnership," said Jim Balderston, senior research analyst at

the Sageza Group. "It's the full faith and credit of IBM coming in with you, and in large enterprise environments that's very valuable."

Laurent Lachal, senior analyst at Ovum, said IBM pushed Novell into the SUSE Linux acquisition so it would have a source other than Red Hat for the operating system.

"Novell wouldn't have done it only for the sake of IBM, but

it's true that with the support of IBM, it made [the acquisition] possible," said Lachal. "Red Hat got extremely arrogant in the way it handled its relationship with IBM; as a result IBM tried to develop an alternative to Red Hat."

### THE CIRCLE OF LIFE

While IBM's initial goal may have been to give it better Linux channels, the relationship also has resulted in giving Novell entrée into corporate accounts that it might not have had otherwise, said Sageza's Balderston.

"Right now, the foot in the door is SUSE Linux, and what can follow after that could be a whole slew of Novell products," Balderston said.

Those products include Novell's identity management products and other network services.

"If you look at Red Hat's play, it's largely an operating system play," said Dan Kusnetzky, IDC's vice president of system software research. "Novell says, we have identity management, and integration software for Windows, Linux, NetWare and Unix. Nov-

ell does not live or die on its Linux revenue," he said. "They are extremely strong in identity management products. The other side of it is if they are already winning on their identity management products, [having a Linux distribution] allows them to penetrate into accounts that they might not have."

"Novell's strategy is they want to be the supplier of enterprise management, security and identity across a number of platforms," he continued. "It's largely an integration play, and an operating system play is secondary."

Nevertheless, according to Yankee Group's Laura DiDio, SUSE Linux has not made up ground on Red Hat's share of the Linux market. "Despite all the publicity that Novell received last year as a direct consequence of their purchase of SUSE, that has not resulted, in North America particularly, in them catching up with Red Hat," she said.

"The latest market share figures that I have show that Red Hat has almost a 50 percent market share among Linux distributors," she said. "Novell has not gained on them. They're at about 25 percent. Debian, MandrakeSoft and TurboLinux are increasing market share." Worldwide market share was similar, she added.

Yankee Group's figures come from a self-selected group of respondents to a Web-based survey.

IDC's Kusnetzky said his company has not published figures for 2004, but that early results indicate that SUSE Linux is continuing a two-year trend of growth while Red Hat has stabilized an earlier market share decline. In 2002, Red Hat had 55 percent of worldwide server operating system shipments and SUSE Linux had 33 percent. The following year, Red Hat shipments made up 46 percent of the worldwide server operating system market and SUSE's made up 40 percent.

"Novell continues to experience growth in the adoption of SUSE Linux," he said. "My sense is [Red Hat] is maintaining its status at this point."

IDC's figures take into account paid shipments, includ-

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# Taking Care of Integration Business

## Magic adds .NET to iBolt; Sterling brings GUI-based BPM to GIS

BY EDWARD J. CORREIA

A pair of integration software vendors revved their products in March.

Magic Software added a .NET Framework to iBolt 2.5, the latest version of its BAM, BPM and EAI suite, while Sterling Commerce added a GUI-based business process management environment to Gentran Integration Suite, now at version 4.0.

Magic's vice president of marketing, Glenn Johnson, said the .NET addition allows the tool to do what it already did for Java objects. "This allows developers to build composite applications using Visual Studio .NET or C# components. It also allows for a cross-framework without any sort of wrapping or preparation of objects for use in iBolt," he said, useful for companies developing with both Java and .NET.

Magic also beefed up database support, adding DB2, DB2/400 and Pervasive to a list that already included Informix, MS-SQL, Oracle and ODBC. Johnson said that the SQL-to-XML data mapper introduced in version 2.0 now also supports ODBC, plus HTML and other flat file formats.

In addition, the company now offers three pricing options for its suite: US\$109,000 per production environment for the data center edition (an increase from \$87,000 for the previous version 2.0); a \$60,000 departmental edition for medium-sized transaction loads; and a \$40,000 peripheral edition for light transactional loads. All versions include the integration server, activity monitor and development components. Also new is a database repository, enabling users to drill directly into database tables.

### ALPHABET SOUP

Nolan Rosen, chief marketing officer of Sterling Commerce, said with the changes to GIS, "we bring BAM, BPM, EAI, ESB, B-to-B and SOA together into one suite."

Pricing remains unchanged at US\$150,000 per server processor for a typical deployment; the software is available now for Linux, Unix, Windows and IBM's iSeries and zSeries servers.

"Our vision is to extend the multi-enterprise to supply chains and value chains to build better collaborative partners. Traditional EI vendors have not met this marketplace demand." He said GIS 4.0 represents the first step toward fulfilling that strategy. "I can think of no other SOA architectures that blend SOA with B-to-B," he said, adding that GIS gives developers the ability to embrace both worlds, "because



**GIS enables developers to embrace both the SOA and B-to-B worlds, says Sterling Commerce's Rosen.**

the alternative is to integrate the integration vendors."

Rosen said new features in GIS 4.0 help developers avoid that debacle by providing visibility into events and business processes through the modeling tool and a customizable dashboard. ■

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# Iona Brings Eclipse Into Fold, Mainframes in From the Cold

BY EDWARD J. CORREIA

HA! With the March release of Artix 3.0, Iona Technologies adds to its enterprise service bus solution high availability, ACID transaction support and mainframe integration, all in a more extensible and pluggable C++ and Java architecture that is now based on the Eclipse development tool framework.

"The main differentiators are now its extensibility, performance, broad platform support and quality of services," which include new high-availability features, stated Carl Triefoff, Iona's director of product management.

"All hardware being deployed can be used [for] load," Triefoff said, meaning that if two nodes would normally be deployed for transaction load plus one for redundancy and one node fails, a full replicated mode still exists. "This allows us to meet the demands of high-end use cases and not incur enormous additional hardware costs." Previous versions offered minimal fault-tolerance features, he said, and relied mainly on server-hardware clustering for reliability.

Other QoS features include

X509 certification authentication and compliance with WS-Atomic Transactions, a specification developed by BEA, IBM, Microsoft and others to define reliable, interoperable transaction delivery.

Triefoff said that the improved transactional capabilities will help Iona more deeply penetrate the company's core markets of finance, telco, government and manufacturing.

## ARTIX GETS CICS

Artix also now supports integration with VMS applications. "That means that we can Web-service enable a 3270 or other normal terminal screens. So if an architect designs an SOA interface and they want the mainframe to be a participant in the network, we support that design methodology and can Web-service enable CICS, IMS, COBOL and PL/I transactions."

To describe the developer experience, Triefoff offered two examples. To Web-service enable an application currently accessed by a 3270 or other supported terminal, the developer first would identify the screen name corresponding to the transaction and launch a

script that presents a URL containing that transaction's service interface. "There's no coding involved. You pick up that interface with our tools or with Visual Studio and generate a client for it," he said.

A similar procedure is involved for COBOL transactions, which are stored in so-called Copybooks. "You give us the Copybook and we generate all the meta information to Web-service enable it on the mainframe and post it as a URL." The solution generates the necessary mainframe and client code. A typical installation costs about US\$10,000 per server processor, he said.

"We've recognized that Eclipse is the leading tool platform, so we've moved all our Artix tooling across to the Eclipse framework," said Triefoff, adding that the APIs also are now far more extensible than previous editions, giving developers the ability to plug in additional transports, bindings and services and create other integrations.

"The Artix API is very plugable; you can deploy as much or as little as you need and add in additional requirements easily," Triefoff said. ■

## Enterprise Eclipse Conference Set for August

BY ALAN ZEICHICK

BZ Media, the publisher of SD Times, is holding the first independent Eclipse conference this August at the Roosevelt Hotel in midtown Manhattan. EclipseWorld will be an educational event primarily for enterprise developers, architects and development managers using Eclipse tools and technologies.

EclipseWorld (www.eclipseworld.net), scheduled for Aug. 29-31, is a different event from EclipseCon, which is produced by The Eclipse Foundation.

Many of the sessions at EclipseCon are focused on the companies and developers building the Eclipse platform, such as the strategic members, add-in providers and committers who belong to the foundation.

By contrast, EclipseWorld's educational program will focus entirely on enterprises that are

using Eclipse internally for their own development projects, or that are considering the use of Eclipse-based tools within their organization.

The goal of EclipseWorld is to help enterprise developers master this cutting-edge technology, and learn how to leverage the entire Eclipse ecosystem, from the Eclipse code itself to commercial and open-source plug-ins and platforms that leverage the Eclipse framework, according to the conference organizers.

"Eclipse is pleased to welcome BZ Media's launch of EclipseWorld," said Mike Milinkovich, executive director of the Eclipse Foundation. "Adoption of Eclipse-based tools and technologies is on the rise, and developers and development managers are

looking for education and training. We think that it's important that leading-edge media companies like BZ Media are taking the initiative with this enterprise-focused conference."

The conference will consist of one full day of tutorials and two days of technical classes. More than 400 attendees are expected. In addition, 20 sponsors are expected to demonstrate their Eclipse-based products, plug-ins and technologies at a separate expo hall.

Three-day event passport prices for attendees range from US\$870, for registration before June 30, up to \$1,195 for registration after July 29. Separate conference passes for the one-day tutorials or the two days of technical sessions are also available. ■



## News Briefs

### NEW PRODUCTS

Versant has released **Open Access .NET**, a new object-relational persistence suite with design-time tools and a .NET runtime. The US\$995 software includes multilevel caching and configurable prefetch, and works with all Visual Studio .NET languages and other MSIL-compatible languages . . . IBM has placed two new autonomic tools on its alphaWorks site. **Policy Management for Autonomic Computing** includes a management tool, a component for policy storage, user libraries and APIs. **Touchpoint Simulator** is designed to help test and debug autonomic systems . . . Metadot has decided to offer a paid subscription version of its open-source portal server. Prices for **Metadot Portal Server Business Edition** start at US\$2,000, and go up



depending on the support services desired; a subscription includes the software, installation support, software updates and access to online training . . . **DOMSpy** is a new utility from Dubbeldam Software that's designed to integrate a DOM inspector into Windows' Internet Explorer browser—a feature that's popular in the open-source Firefox browser. The US\$49 DOMSpy shows the document object model tree, style and positioning attributes for elements on the rendered HTML page.

### UPGRADES

ComponentOne is offering a beta of its **Studio Enterprise** component suite for Visual Studio 2005. This update incorporates the .NET Framework 2.0 versions of the components, which the company says will take advantage of WinForms smart tags, data binding, GDI text and managed themes, as well as WebForms resource-based scripts and images . . . Microsoft has started shipping **Visual FoxPro 9.0**. This latest release lets developers use hierarchical XML and Web services, and also can communicate with SQL Server through enhanced SQL capabilities and new data types. The language produces Win32 binaries, not .NET code. Microsoft has committed to support Visual FoxPro, which costs US\$649 per seat, through 2014 . . . Version 3.0 of **WebRenderer**, the Java browser component from JadeLiquid Software, is primarily designed to render pages faster and improve stability, according to the company. The component supports HTML 4.01, SSL, JavaScript, CSS 1 and 2, XSL, XSLT, XML and DOM . . . Catalyst Systems has updated its build management tool, **OpenMake**. Version 6.3.1 improves support for building multiple .NET applications and multiple .NET configurations. For Java developers, the release has new build types for BEA's WebLogic app server and the SQLJ language. It also supports parallel compiling and linking of multiple binaries under z/OS . . . Etnus has released a version of its **TotalView** 32-bit and 64-bit Linux/Unix debugger for IBM's Blue Gene/L supercomputer. The company also will release the beta for a Mac OS X version in May. Pricing for TotalView starts at US\$600 . . . Version 5.0 of **Ch**, the C/C++ interpreter from SoftIntegration, has stronger threading and now supports as many as 500 simultaneously running interpreter instances within an application. It also adds more than 100 Unix utility programs from GnuWin32 for Windows . . . LogiXML has updated its **LGX Report** XML reporting tool and server for .NET. Version 7 of the report builder improves the ability to work with definition files, augments its CSS



management, and has other fixes and enhancements. There is no fee for a single-processor production server license. The company also offers an enhanced version, called **LGX Report Plus**, which adds scheduled reports, custom alerts and more security, for US\$495 per developer and \$1,495 per server processor . . . Antepo has released an SDK for **Open Presence Network System**, the company's instant messaging platform. The SDK's APIs let developers build OPNS-based instant messaging and collaboration into their applications . . . Indigo Rose Software has added a new scripting engine to **TrueUpdate**, its component for integrating automated patch capabilities into Windows applications. Version 2.0 also includes a new project wizard. The software costs US\$1,295 per developer, with no royalties or per-client subscription fees . . . Recursion Software has added support for

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# OpenServer Gets Long-Awaited Update

## Both SCO operating systems now based on same SVR5

BY EDWARD J. CORREIA

In the world of software, six years between updates is an eternity. Yet that's how long it's

been since the last major release of OpenServer, flagship of The SCO Group. The company in March began beta test-

ing OpenServer 6, the latest version of its Unix operating system now based on Unix System V release 5. General avail-

ability is scheduled for June; pricing was not disclosed.

"The priorities of a previous CEO was to push OpenServer

[customers] to UnixWare," said SCO spokesman Blake Stowell, of the lapse between updates. He said customers resisted. "The next CEO tried to move them to Linux, and again there was pushback." But current CEO Darl McBride, Stowell said, is listening to demands from buyers of the product that he claimed represents more than 60 percent of SCO's operating system sales.

Aside from the physical increases in OpenServer 6, which will support 16 processors, 16GB of general purpose memory and 64GB for special applications such as databases, developers also will have more application choices. "OpenServer customers can take advantage of more applications, because there may be applications that they want that were only available on UnixWare. Now UnixWare apps will run on OpenServer because they share a common kernel." Stowell claimed that apps written for the current version of OpenServer, based on SVR5 3.2, will run unchanged on the new system. "Even with that major change, we're still offering backward compatibility on all applications from the past."

Having both its operating systems running the same kernel also benefits SCO. "Previously there were two operating systems on two separate tracks, and we had to maintain two different kernels. Now we can take advantage of capabilities our engineers have built [into UnixWare] on both products."

### KEEPING IT OPEN

OpenServer 6 also will include and be preintegrated with the latest open-source versions of popular applications and server software, including MySQL and PostgreSQL databases, Apache's Web server and Tomcat Java Servlet container, the Mozilla browser, and Samba file and print servers. The company also will continue to include its OpenServer desktop, as well as the KDE Desktop environment. "We've been also getting requests to include open-source [windowing] tools, so we're including KDE." In addition, SCO will include its SCOx Web Services Substrate legacy-to-Web services integration framework.

Developers can sign up for the beta program at [www.sco.com/products/beta/app/signup.html](http://www.sco.com/products/beta/app/signup.html). ■





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# Pervasive Improves Legacy, SQL Relations

BY EDWARD J. CORREIA

Pervasive Software in March released PervasiveSQL 9, the latest version of its application specific database that it says can store application and business logic in SQL databases and supports access to legacy ISAM and COBOL data using SQL tools.

ISAM, short for the indexed sequential access method, is most efficient for creating transactional applications, according to Chris Kauffman, PervasiveSQL product manager. "The ISAM transactional interface is extremely fast, much faster than SQL would be, especially for applications like accounting, logging or for cash registers."

While the dual-access PSQL engine already was able to access ISAM data through its Btrieve API, Kauffman said version 9 now provides legacy access through ODBC, JDBC or ADO.NET interfaces. "There are things you do in ISAM that don't make sense in SQL." For example, he said that while a SQL database would store multiple phone numbers for a person in a separate table, ISAM would store them in a record. "Version 9 turns that ISAM record into a virtualized table, giving SQL developers what they're used to seeing." It also works in reverse, he said, so "developers on each side see what they're used to seeing, and any of those [interfaces] can now get to these older forms of data and future-proof their applications."

On the SQL side, Kauffman said version 9 offers enhancements to performance and SQL syntax. "Performance is better on [functions] like JOINS," he claimed. The database also now supports CREATE functions and the CASE statement, which he said are useful for coding business functionality onto a database, such as for converting Celsius to Fahrenheit. "Each time an application gets a Fahrenheit value, you could store the Celsius value. That [function] could be put into the database."

In all, about 30 performance optimizations and 20 syntax editions have been added, Kauffman said, the latter of which "makes it easier for

applications to support more than one [vendor's] database."

## APP ON ECLIPSE NOW

All of PervasiveSQL 9's major development interfaces have

been rewritten in Java, according to Kauffman, and are now accessed through Eclipse. The company also has reintroduced DDF Builder, a tool for coding and managing the data dictionary

files that contain the metadata for Pervasive's data structures.

Also new is full-text search, which Kauffman said permits developers for the first time to set up ad hoc Boolean searches

against data stored in a relational database. "That lets you do unstructured Google-like searches of data that people typically think of doing with Internet search engines." ■

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# AmberPoint's New Visuals Give a Clearer Picture

## Flash replaces HTML as underlying display mechanism in SOA dashboard

BY YVONNE L. LEE

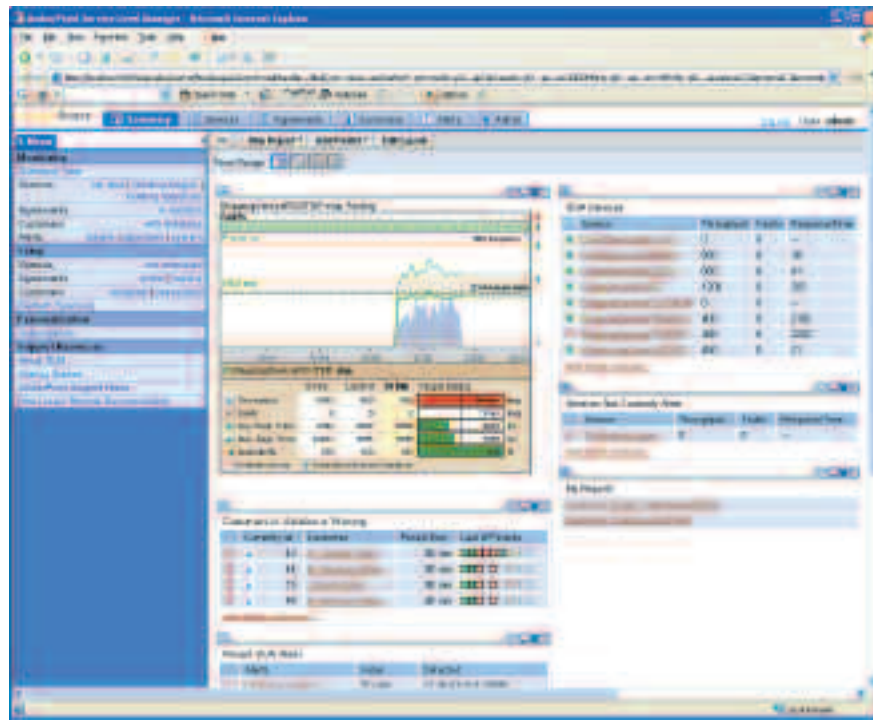
AmberPoint has added new visualization to management consoles that give real-time interactive views of SOA applications' performance.

The management consoles, which are customizable collections of portlets, are referred to as dashboards, said director of marketing communications Bob Dever.

The dashboards, which display the results across the line of the company's products, now use Macromedia's Flash technology instead of HTML. Using Flash enables the portlets to display live data, to be interactive and to show more data than an HTML-based portlet of the same size, said Ed Horst, vice president of marketing.

The new dashboards are part of AmberPoint's suite of products and are not sold separately. Those products are the AmberPoint Management Foundation, Service Level Manager and Exception Manager, said Dever.

The new portlets show changes in the applications' activity in real time, while the old version delivered HTML snapshots of network activity, according to Horst. In addition, the portlets are inter-



Using Flash technology instead of HTML, AmberPoint's dashboards now show greater detail.

active, enabling users, for example, to drag a mouse across a data point to drill down and get specific numeric or text information about that data point. The

new dashboards can show more information in each portlet, said Horst. "It allows you to pack a lot of information in a small amount of space and have it all be useful," he said. "If you tried to do all that in HTML, it would swell to your

whole page." Flash affords more control over the size of fonts and layout than using HTML and Cascading Style Sheets, he said. In addition, getting precise control over those elements would involve sending large graphics files across the network, he said.

"The advantage of Flash is you have fine-grained control of the information without having to send big pictures across the wire," said Horst.

In addition to the new portlet capabilities, the AmberPoint products can now pull data from multiple UDDI registries. They automatically detect changes in the registry and update the management system. Organizations may use different UDDI registries to store information about different departments' Web services, or they may have separate registries for development, staging and deployment, he said. The management consoles now can gather information from multiple registries and display that information within a single portlet, he said.

AmberPoint has been supporting Systinet's UDDI registry since September 2004 and now has expanded that support so that it can read information from any UDDI 3.02 registry, he said. ■

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## Telelogic Extends Doors To Distributed Teams

BY DAVID RUBINSTEIN

Focusing on support for distributed teams, Telelogic late last month released a new version of its Doors requirements management tool that has been developed as a three-tier solution, according to the company.

Doors XT brings together a single repository for requirements with a Java application server that provides a mechanism for extensibility and a Doors client sitting "anywhere in the world," according to Richard Watson, director of product management for requirements management tools at Telelogic. Currently, Doors XT ships with BEA's WebLogic application server and supports the Oracle database, he said.

"People are no longer working in a close-knit community, but they still need to work against a single repository of requirements," he said. XML import/export allows requirements to be shared, and lets users push requirements into other products and workspaces, Watson said. He added it has been designed to have a light footprint for a network, but emphasized it is not a Web-based application with limited functionality.

While the company's Doors product is focused on developers already aware of requirements and their management, XT is finding a place with a wider audience of people who use requirements but perhaps call them goals, or objectives, or risks, Watson said.

Among the differences between the Doors product and Doors XT is that in the XT version, users can lock down requirements as they are being changed; in Doors, users can only lock larger sections of documents, tying up others that may need access to another part of that locked section, Watson explained.

The look and feel of XT is the same as Doors, Watson said, with some refinements to the interface. In XT, users get a tree browser with a hierarchical list of requirements that can be drilled into for attributes, history and access rights. Also, individual requirements can be viewed in the context of the requirements around it. "Often, a design is affected by the overall collection of requirements," Watson said.

A single, floating license of Doors XT costs US\$8,300 or €8,300. ■

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# ClearNova Aims to Simplify Transactional Application Building

BY YVONNE L. LEE

Consulting company ClearNova is selling a development platform that it claims can create J2EE applications in half the time it would take for a company to create its own framework

or to use a combination of open-source products.

The platform, called ThinkCAP, had been sold as part of the company's consulting services. In March, for the first time, the Alpharetta, Ga.,

company broke it out as a separate stand-alone product but labeled it version 6.0.

"Versions 1 through 5 were basically used by ClearNova when they did a project for customers. Version 6 'productizes'

that experience," explained company spokesman Bill Baker.

ThinkCAP comprises ClearNova's development environment, called Workbench, as well as a runtime engine and a set of open-source components.

"The secret to their sauce is their visual designers," said Baker.

"When I think of things in the Java community that cause pain, I guess I would call it overengineering," said Steve Benfield, vice president for strategy and technology evangelism. ThinkCAP is designed to insulate developers from the complexities of creating Java applications, he said.

ThinkCAP attempts to remove the complexity of designing applications for Java by enabling developers to visually build complex applications from components in the package or from built-in components the organization creates, which the runtime engine interprets.

Developers use the visual designers in Workbench to make input and output forms, to spell out the workflow and to bind data to variables, said Benfield.

In addition to the visual editors, ThinkingCAP has a built-in content management system.

ThinkCAP is designed to create transactional business applications and is being marketed toward programmers who typically do not work with Java but have used fourth-generation programming languages such as Visual Basic or database query languages.

Because of this, the company has not yet felt the need to convert its development environment to run within Eclipse, even though many of the tools with which it integrates are Eclipse tools, Benfield said.

Benfield compared using the US\$15,000 per processor server software package to building applications with Sun's Java Studio Creator, but Benfield claimed his company's product is even easier to use. "There are a lot of moving parts that you still have to handle through Java code [in Java Studio Creator]," said Benfield. "I also think there's an inherent distrust in Sun's ability to have a successful software product. They're much better on the hardware side."

Benfield said the tool is particularly well suited for creating prototypes. "We can get that prototype done quickly, and developers can come in and start fleshing them out and making them real," he said. ■



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# Microsoft Unveils Visual Studio Pricing

BY ALAN ZEICHICK

Last month, Microsoft announced the pricing for the myriad editions of the forthcoming Visual Studio 2005. That's the upgrade, long referred to as "Whidbey," to Visual Studio .NET 2003. VS2005 is timed to accompany the release of SQL Server 2005, with an emphasis on adding the new features required to program to the database's new .NET Framework runtime, as well as new application life-cycle management features to some editions.

There are essentially two different flavors of Visual Studio 2005: with Team System and without.

The three editions of Visual Studio 2005 that ship without Team System are roughly similar to today's Visual Studio .NET 2003, and focus on the multilanguage integrated development environment that can develop both native Windows binaries and managed code for the .NET Common Language Runtime (CLR).

Visual Studio 2005 Express, US\$49, is the entry-level product, which includes minimal documentation, local database connectivity and extensibility. It doesn't contain the Visual Studio class designer, mobile development support, server deployment tools, report or source code control.

The Standard and Professional editions of Visual Studio include the tools that the Express edition doesn't have. The biggest differences between them is that the \$799 Professional Edition can create both 64-bit and 32-bit native binaries, and can create .NET managed code that runs on both the standard .NET CLR and SQL Server 2005's managed runtime. The \$299 Standard Edition can target only 32-bit binaries or the standard .NET CLR.

## ENTER TEAM SYSTEM

Visual Studio 2005 Team System is Microsoft's new application life-cycle platform to bring modeling, testing and collaboration into the IDE, and will be competitive with suites from companies such as Borland and IBM/Rational.

There are three editions of Team System, targeted for testers, software developers and software architects. Those cost \$5,439 per developer

seat—plus an annual renewal price of \$2,299. Each Team System seat includes an MSDN Premium subscription. What if someone wants the combined functionality in all three editions? The "Team Suite" edition

costs \$10,939 per developer, plus \$4,598 per year after that.

Microsoft is offering only named user licenses for Team System; there are no floating licenses, which some other ALM vendors offer.

The pricing for Team System is comparable to offerings from established ALM players. Borland has recently started shipping Core Software Delivery Platform, a role-based suite of tools made of its CaliberRM

requirements management, Together modeling, JBuilder Java IDE, StarTeam collaboration system and Optimizeit performance management software, at \$5,900 per seat for a single role. IBM's Rational Suite, which encompasses all four roles, costs \$9,620 for a named user or \$10,245 for a floating license. ■

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# XQuery Takes Off, But How Fast Is in Dispute

BY ALAN ZEICHICK

XQuery, the de facto standard language for querying and transforming XML, is getting more popular. That's according to reports from two different sources—one from independent research firm Evans Data, the other from DataDirect Technologies, a company preparing to release an XQuery API for Java later this year. However, the data presented by Evans and DataDirect varies significantly.

DataDirect released a study in late March that said that out of 550 developers who responded to its XQuery study, 248 said they were already using the language, and another 158 indicated they have plans to do so in 2005. According to Larry Kim, marketing director, the sample base for this study was 75,000 individuals pulled from trade-show lists, direct marketing firms and DataDirect's registered customers and customer prospect lists.

According to the DataDirect study, 43 percent of respondents said they use XQuery because it simplifies XML data access and transformation, 30 percent said that it has "a more concise and easier syntax and programming style," and 24 percent said that it helps unify heterogeneous data sources, such as EDI and flat files.

The write-up for DataDirect's study, which was interspersed with marketing promotion for Stylus Studio, the company's XML editing suite, said, "The high XQuery adoption rate (73 percent of software professionals surveyed) is difficult to dismiss because of the quality of the data." Further, the DataDirect study claims that the results "closely mirror the results of a 2005 study by Evans Data Corp....which revealed that '44% of those surveyed said they are using XQuery.'"

## ANOTHER VIEW

That's not Evans' interpretation of its XQuery data, published in its Winter 2005 Database Development Survey. According to spokesman Erik Orgell, his company's study was only of database developers—not all software professionals. He said that makes it impossible to equate one study that shows 73 percent with another that says 44 percent. "There's a huge

difference," he said.

Evans' XQuery numbers also did not pertain specifically to XQuery adoption but were the results of a forward-looking question: "Which database oper-

ations would you expect to expose or invoke through Web services interfaces?" XQuery was the third-most-likely response, behind stored procedures (63 percent) and SQL Query Web

services (53 percent).

Further, the Evans data actually showed a year-on-year decline in XQuery interest: "44% of respondents indicate that they intend to begin adopt-

ing XQuery—which is seen by many as the Web services incarnation of SQL Query—as the standard for searching XML-based data within databases. This is a decrease from last year, however, when 63% said they intended to build data interfaces around XQuery," the study's analysis read. ■

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# OpenLogic's BlueGlue Automates Open-Source Installation

BY YVONNE L. LEE

An update to the subscription service from OpenLogic released last month bundles more than 100 open-source products and automatically installs and configures them.

"We take about 100 of the top open-source tools above the operating system," said vice president of marketing Andy Grolnik. "Where Red Hat

leaves off, we pick up."

The service, called BlueGlue Open Source Management Suite 3.1, includes a utility that automatically installs the software. Subscribers receive quarterly updates to the software.

According to Grolnik, one thing that separates BlueGlue from other such open-source bundles is that the software in the BlueGlue suite runs on both

Linux and Windows.

"Eighty percent of developers are developing on Windows. They may be deploying on Linux, but they're developing on Windows," he said.

"If you were installing all 104 [software products], it might take an hour, worst case," said Grolnik. "The more likely scenario is 20 to 30 minutes. The advantage here is

you've got choice."

Among the products included in the suite are the JBoss Application Server and the MySQL and PostgreSQL databases, as well as software for integrating with IBM's DB2 and with the Oracle database. Grolnik said the tools included in the suite run the gamut from development tools to deployment products.

Version 3.1 also adds more

Web development frameworks, said Grolnik. "We had Struts, and we added Tapestry, Spring, Webwork and JavaServer Faces. Now, we have a total of five," he said.

In addition, the US\$399 per-year, per-seat subscription includes sample applications, which Grolnik said helps developers determine which products to use for a given purpose. ■

## JBOSS, NOVELL TIGHTEN OPEN-SOURCE RELATIONSHIP

< continued from page 1

ell is taking components of its own proprietary portal and building them into the project.

The project was due to come out this summer before the announcement, according to Bickel, and still is on target for that delivery time frame, but when it is released, it will have greater functionality.

"Now, all of Novell's identity management stuff plugs in," Bickel said. Novell will build its portlet container—Web Services for Remote Portlets—and its entire portlet library into

JBoss Portal.

Novell said it would ship a number of JEMS components in the 2006 release of its Extend application. The JEMS system currently includes the JBoss Java application server, the Hibernate object-relational mapping tool, the Apache Tomcat servlet engine, JBoss JBPM for business process management, a cache, the portal and JBoss Eclipse IDE, available under separate download. The system and its components are available under the LGPL open-source license.

At BrainShare, Novell announced Linux Small Business Suite 9 to help companies move to that operating system. The suite will include Novell's GroupWise collaboration software, the SUSE Linux server and Novell's Linux Desktop. The next version of GroupWise is due out this summer, and is expected to include Linux, Macintosh, Web and Windows client support and new interfaces to allow the integration of Web services into GroupWise.

The company also announced a new version of its ZENworks

management console, set for release later in the second quarter. ZENworks 7 will let organizations manage both Windows and Linux desktops from a Linux console, where it previously managed Linux only. Pricing has not yet been set. ZENworks 7 Suite also includes support for Novell's Open Enterprise Server and enhancements to the Desktop, Server and Handheld Management products.

Novell also announced that it would continue to support its GroupWise collaboration product, even in the face of its

coming Hula open-source collaboration product. Hula, announced in February at LinuxWorld, will be based on Novell's NetMail and will also include calendar functionality.

"Just because we're moving to open source doesn't mean we're abandoning GroupWise," said Novell CEO Jack Messman, who compared it to the company's introduction last year of Open Enterprise Server, which enabled organizations to remain on NetWare while transitioning to Linux. "Just like with NetWare, we're going to support it for a long time."

Novell will support GroupWise through 2015. ■

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# Intland Looks to Make CM Inroads in U.S.

BY DAVID RUBINSTEIN

German company Intland is hoping to make headway in the United States with a distributed, collaborative development environment with strong change management capabilities and a new American presence in North Carolina.

The environment, called CodeBeamer, is a downloadable package that includes open-source projects MySQL, Apache Tomcat and CVS version control. The next version, due later this year, will include Subversion, the version-control project developed on CollabNet. CodeBeamer sits a layer above the version-control system and integrates with IBM/Rational ClearCase, Microsoft Visual Source Safe, PVCS and Telelogic CM Synergy, according to the company, allowing developers to continue to work in those existing systems.

What makes CodeBeamer unique, said company co-founder Janos Koppany, is a managed repository service for

read/write access. "Subversion has no Web interface and no administrator services at this time," Koppany said.

An issue-tracking capability allows users to create items—requirements, defects, change

requests, tasks and the like—and give them properties of tracked items, such as their status or their links to other items or projects. An "SCM loop" feature forces developers to enter an issue number at check-in, which

is associated with a task or bug fix. This is an enforcement of those associations, Koppany said, noting that when development is done over a network with different firewalls, this type of item association could not be done

effectively. Further, project managers can have better control of changes that are made and could impact the entire project or its resources, he added.

CodeBeamer is available for a 21-day trial, during which time all the features can be tested. It is available for purchase at US\$995 per named-user license. ■

## Black Duck Hosts IP Protection Service

BY DAVID RUBINSTEIN

Black Duck Software late last month was to make available a hosted service that will allow subscribers to ensure an open-source software project under development is not violating any intellectual property rights.

Called protexIP/OnDemand, the service is for small businesses looking to get started with software compliance management, or for a company looking to do due diligence regarding a merger or acquisition, according to founder and CEO Doug Levin. The company's protexIP/Development is the enterprise version that sits behind a company's firewall and is used to determine the origins of open-source software and help determine if there are issues with third-party code, he explained.

The Black Duck client is a pointer, and the back-end system does a code print from the source repository—whether CVS or some kind of SCM system, he said. That print is then compared with the Black Duck knowledge repository of more than 500 open-source licenses to find any infringements, right down to the code snippet level, he said. ■

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# New Look for LANSA iSeries Tool

BY JENNIFER DEJONG

When talk turns to legacy modernization, the mainframe gets all the attention. But applications that run on midrange computers also are in need of a makeover.

Last month, Downers Grove, Ill.-based LANSA updated its integration and development suite for building modern front ends to applications that run on the IBM iSeries, formerly known as the AS/400. New to

LANSA 2005 is improved Web services support, compared with the previous release, LANSA 10, which still required the developer to hand-code parts of the process. "All core application code is automatically enabled as

a Web service," said the company's vice president of marketing, Brian Sterrett. "You just check a box that says, 'Turn this into a Web service.'"

The updated offering, which typically costs about US\$25,000,

adds support for handheld devices and has a new, more graphical look and feel, making the design and data modeling process more productive, Sterrett said. Also improved is the process of preparing the application for each of the targets on which it will be deployed. In the past, the developer had to rebuild the program for each device type, such as Windows, Web browsers and PDAs.

LANSA 2005 is a stand-alone offering, but the company plans to offer editions that work with Microsoft Visual Studio and with IBM's Software Development Platform. "But we are not focused on moving applications off the iSeries," Sterrett said. "The suite helps people leverage what they have." ■

## Blue Titan Revs Network Director

BY DAVID RUBINSTEIN

Support for the WS-Reliable Messaging specification and the ability to order message delivery are among the new features in version 3.5 of Blue Titan Software's Network Director Web services integration framework, released late last month.

The company has designed the software to help users overcome three hurdles, according to director of product marketing Chris Schin: services that are "trapped" in department islands, massive incompatibilities between Web services in use in an enterprise, and guaranteeing delivery to the end point.

Often, organizations deploy BEA Queuing, IBM WebSphere MQ, Microsoft MSMQ, TIBCO and other middleware within different departments, Schin said. And, he noted, some Web services support certain standards such as WS-Security, and some do not. Network Director is designed to unlock those services from the middleware they are bound to and reconfigure the messages in such a way so the receiver can handle it, Schin said. "We're trying to bridge over what's already there."

This is achieved by a Network Director user's ability to offload nonfunctional policies onto the network, decoupling it from production code, Schin explained. Then, if a policy changes, such as which users have access to the service, it can be changed in the network without either having to take the service down or having to modify production code. ■

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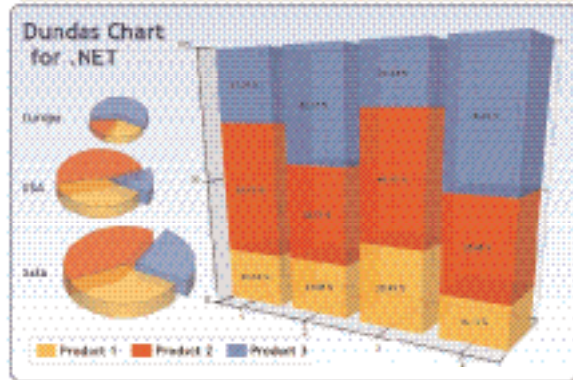
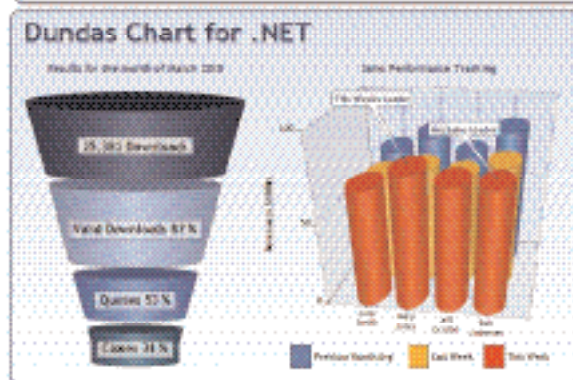
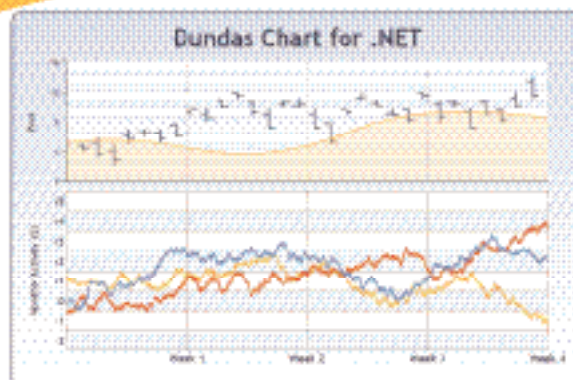
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# JCP 2.6 Works Toward Being More Visible

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tion, and that often can be based on the lead company's internal processes.

Nevertheless, Williams said that the JCP has made specifications visible earlier in their development, which he said shows an increase in efficiency. "Before JCP 2.6, the time between when a JSR was started and when it reached the first review period was 200 days. That time has come down to 125 days," he said.

Williams cited a reduction in the number of JSRs led by Sun

as a measure of greater participation by other companies.

"At the end of 2004, Sun was leading one-third of all active JSRs," he said. "When you look at that statistic a year ago, it was closer to one-half."

Williams said that while the group has no specific plans for the next version of the Java Community Process, the process will be reviewed in the next executive committee meeting.

"There are no plans, [just]

continuing the dialog with the community about where the pain points are, what's good, what's bad," he said.

Some early feedback the group has been getting is that it needs "more rigid transparency

requirements" and that some companies would like to see if it is possible to make it less expensive to create a specification.

The group may not embark on a new JCP, however, but instead may tackle a smaller project, such as making the group's Web site more efficient, he said. ■

## Aztec Helps ISVs Modernize

BY EDWARD J. CORREIA

There's nothing ancient about Aztec Software. The Bangalore, India-based consultancy specializes in helping companies figure out how to migrate their proprietary software stacks to those based on open source. In early March, it introduced a suite of services focused on helping companies build data management, network identity and Web services solutions using modern open-source technologies.

"There are a lot of open-source stacks available from a variety of vendors, but there is a dearth of resources available to help implement them," said Sharish Netke, the company's head of U.S. operations. "Very few people have the expertise to figure out what is the right thing to do with open source."

Although the company provides no legal counsel, it has since 1995 offered outsource and offshore development, porting and test and QA services, mainly to ISVs and a few enterprises. It counts among its clients Cadence, IBM, J.D. Edwards, Microsoft and Novell. "When product companies make decisions on open source, they have to go through a lot of rigor in terms of developing different options," Netke said.

Part of the value Aztec brings, he said, is its experience not only with open source, but also with the entire software development life cycle. "We cover everything from architecture to the point of need," Netke said most of Aztec's development contracts fall between US\$500,000 and \$1 million. ■



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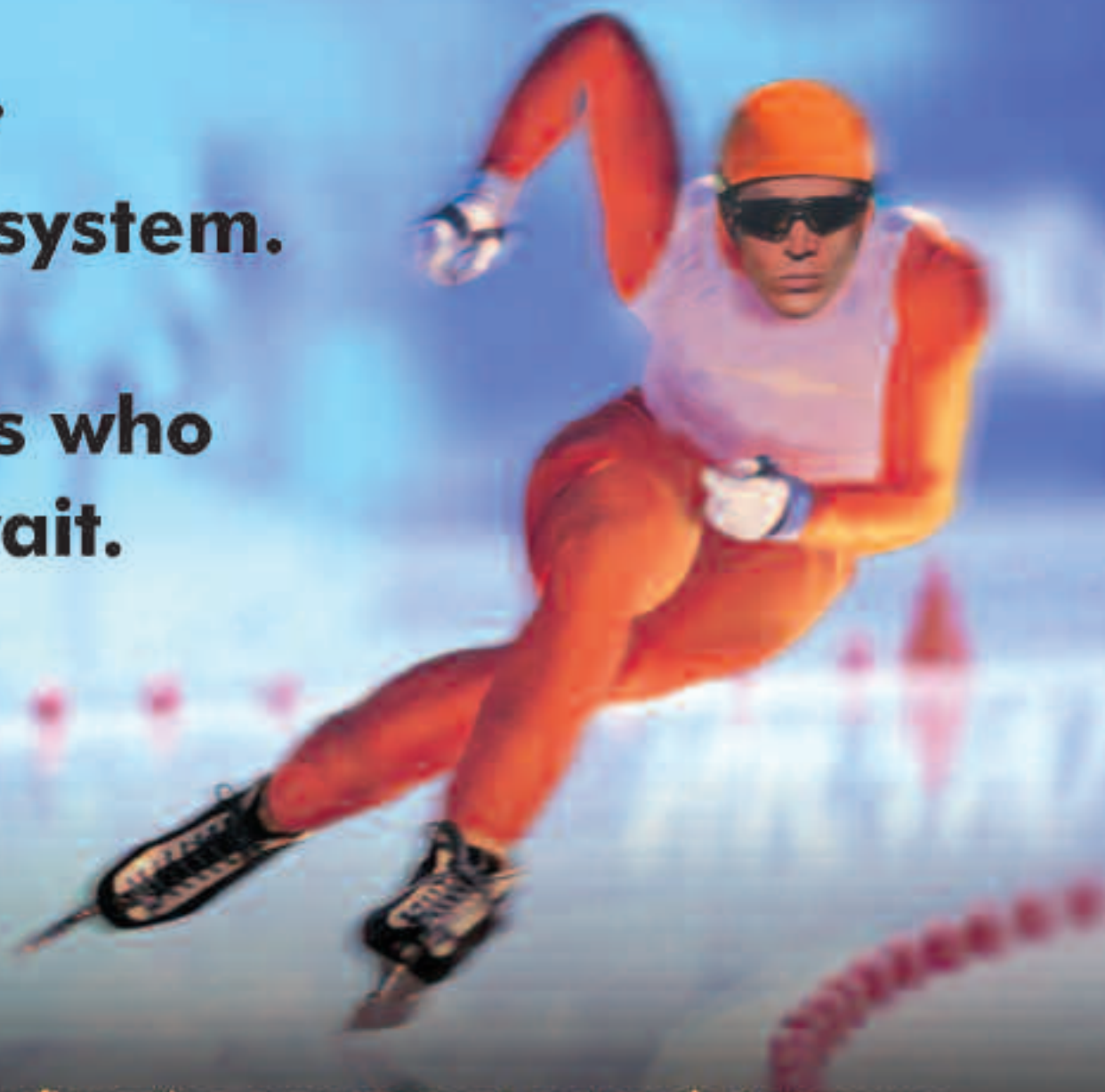
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# Novell Challenges for Linux Crown

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ing those shipped with hardware, but do not include free downloads or replicated copies, he said.

## AIMING LOW

Kusnetzky attributes Red Hat's initial decline in server operating system market share to a change in how it packaged its distribution. While Red Hat offers two tiers to its Linux distribution (the fully supported Enterprise Linux and the free Fedora, for which users must support themselves through forums and a knowledge base), Novell has three offerings (an enterprise version, a self-supported open-source version and an intermediate version with pay-per-use support). Smaller companies that cannot afford an enterprise license but do not have the technical resources to support themselves, will want to use the third option, he said.

Sageza's Balderston said he believes the small and medium-sized business markets need software once needed only by large enterprises, and that offerings such as the Linux Small Business Suite, which Novell announced at BrainShare, should help Novell with both large and small businesses.

"The large enterprise IT vendors are starting to push products toward the [small and medium-sized business] market," he said. "There are tens of thousands of customers, and those customers look more and more like enterprise IT deployments."

## CAN IT EXECUTE?

For Novell to carry forward its goal of leading in enterprise open-source software, it will have to execute with the acquisitions it has made to date, say analysts. "If one looks at Novell's acquisitions over the past 10 to 15 years, how many of those acquisitions have been successful?" asked Yankee Group's DiDio rhetorically. She pointed specifically to Novell's acquisitions of WordPerfect and UnixWare, both of which faltered under Novell's ownership. Both those products were acquired under former chairman Ray Noorda, she added.

"If you look at Novell's most recent acquisitions, I haven't seen any traction for any Linux desktops, and specifically Ximi-

an. They keep saying they're going to execute, but it was the same thing when they spent \$212 million for SilverStream." Novell had offered the Extend suite, which it acquired through

SilverStream, as its Java application server, but last August at LinuxWorld in San Francisco, Novell announced that it would bundle the JBoss application server with Novell's Enterprise

Linux server instead of the Extend server.

## CHALLENGES AHEAD

For Novell to continue expanding into the Linux market, it will

need to market more heavily into the traditional Linux markets, according to IDC's Kusnetzky. "Novell's challenge isn't technology, it's marketing at this point," he said, "and this has [traditionally] been a challenge for Novell. The Linux community, if you ask them about Novell, they don't know that name yet," he said. ■

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# Business Intelligence Grows Beyond Mere Reporting

◀ continued from page 1

worth explained. "Also, we can utilize features for data warehousing inside the database."

Business Intelligence 10g includes Oracle Discoverer, which lets users take data from most any source and use it in a dashboard, or do query and analysis against it regardless of whether it's a Microsoft Excel spreadsheet, in an OLAP server or a relational database, he said. "The focus is to make the data source irrelevant," he said. Warehouse Builder has ETL functionality, and a spreadsheet add-in gives access to OLAP directly from Microsoft Excel.

Another piece of the solution is what Oracle calls BI Beans—reusable Java components for creating custom BI apps in a Java development environment, Illingworth said. It costs US\$20,000 per server processor or \$400 per named user.

## SLICE AND DICE

Meanwhile, Microsoft also announced plans to further enhance the BI features in SQL Server 2005, due to be released this summer. Microsoft looks at BI from the point of view of integration, analysis and reporting, said Tom Rizzo, SQL Server director of product management. Integration Services can run queries that return information in readable format. Analysis Services, formerly OLAP Services, is where the slicing and dicing of data takes place, and the company introduced Reporting Services in January 2004.

New in SQL Server 2005 is a Report Builder that looks like Microsoft's Office suite, so that business users can create reports that leverage the full power of Reporting Services on the back end, Rizzo said. "Now you don't have to use Visual Studio to create reports," he said.

Microsoft also is shipping an embeddable version of Report Builder, so people can build apps with this functionality, which involves dragging controls onto a form, creating a report definition and rendering it out, Rizzo said.

Microsoft's Analysis Services will now use proactive caching, borrowing the idea from the Web, to build an OLAP cache

automatically without human intervention. And Integration Services will be built into Visual Studio 2005 to allow for easier debugging of the ETL process, as well as the ability to integrate Web services and XML with relational data, which then can be pushed back out as Web services or XML, according to Rizzo.

All of this new functionality is being rolled out in Community Technology Previews. "ETL, OLAP, data mining and reporting are out-of-the-box with SQL Server," Rizzo said.

Office is the front end to Microsoft's BI platform, and Microsoft is releasing a new Business Scorecard Accelerator, which sits on Sharepoint and uses a portal interface to pull data out of SQL Server. The scorecards can present data on business missions, such as generating more sales and maximizing workforce efficiency, Rizzo said.

## A STANDARD SYSTEM

While data analytics clearly is important, another vendor, Information Builders, believes businesses must have a standardized information retrieval and analysis system throughout the organization.

"We think the fat part of the market is to get operational and transactional systems mapped into the BI solution, to provide actionable information that supports the business," said David Sandel, vice president of the BI products group at Information Builders. "People want to implement an enterprise BI solution."

That, he said, means BI solutions have to scale. Information Builders does this by creating autonomic systems that turn on or off as defined by the business to meet its data analysis and integration needs. Service levels are defined, and the system responds automatically when necessary to meet those needs, Sandel explained. The result, he said, is an integration infrastructure that makes all data accessible and presentable in a way that's meaningful for everyone in an enterprise.

WebFocus 7, the company's solution that was released last month, has hundreds of new features, Sandel said, noting that wizards for SQL and para-

metized reporting are among the highlights.

The SQL wizard is designed to enable users to take SQL and incorporate it into WebFocus, while the reporting wizard helps users build HTML screens and drop-downs to present the data once a data source has been identified. A unified metadata tool allows for data to be imported from ETL tools or through other metadata interfaces, enabling a more global approach to information, he said.

## HOW'RE YOU DOING?

While collecting and sorting data is important, you often can't drill into the data to find out why, for example, a company didn't meet its sales estimates.

That's the realm of business performance management, a subset of BI that Brian Barnes, director of product management at Applix, described as critical to budgeting and planning.

Applix is a contributor to the Business Performance Management Partners Group, which outlined a framework for modeling a business. "You can describe how you make money, or how your operations work, and once that's modeled, then you can dig into it," Barnes said. "If you're not making what you expected, you need the power to react."

What provides that functionality in the Applix TM1 platform is the underlying multidimensional OLAP database, Barnes said, with modules for workflow, financials and other business requirements. "The value [of BI tools] we see goes way beyond reporting," he added.

The company updated the suite last month with an enhanced Excel interface. "We use Excel as our main client," Barnes said. The dynamic capabilities of the interface have been upgraded to allow more interaction with the database, he explained.

Also in TM1, Applix bumped up the number of dimensions that can be held in a cube to 256, matching SAP's Business Warehouse and Microsoft's Analysis Services, Barnes said, so that data can be brought into TM1 from those sources or pushed out from TM1 to those other platforms more easily, Barnes said. ■

## News Briefs

### MORE UPGRADES

◀ continued from page 5

Solaris 10 to its **C++ Toolkits**, a collection of C++ class libraries. The libraries already worked with Solaris 9 as well as a large number of other Unix versions, Linux and Windows . . . 4D has a maintenance release for **4th Dimension 2003**, an older version of its cross-platform relational database; version 2003.6 contains several bug fixes. 4D shipped a major upgrade, 4th Dimension 2004, last year for Macintosh and Windows . . . AutomatedQA has updated **TestComplete** and **TestExecute** to version 3.10. These releases improve support for Delphi 2005 and solve compatibility issues with Windows NT . . . Accelerated Technology has added a new running system debug feature to the **ARM RealView Developer Suite** for the Nucleus Plus real-time operating system kernel. This lets developers using the RealView RVD Debugger halt individual Nucleus software tasks without needing to halt the CPU . . . Compuware has opened its **QACenter Enterprise Edition** to Japanese users by creating a Unicode version of its **TestPartner** functional testing product and adding Japanese localization. Chinese and Korean versions of the product are in the works, said Richard Pugh, worldwide director for QACenter. The company also updated its **QALoad** load testing product, focusing on tighter integration with Oracle's Database 10g and E-business Suite 11i, and SAP applications. QALoad now can record both Web traffic and proprietary Oracle Forms traffic in the same script. New capabilities in the product's SAP integration make it possible to restart a transaction when QALoad encounters an error, and then clear the memory and restart that virtual user. Compuware claims this makes it possible to more accurately represent SAP users and their activity levels . . . Software FX has revamped **Chart FX Internet**, its charting component suite for ASP servers. Version 6.2 adds new point-and-click interfaces for designing charts and for integrating those charts with ASP code. It also unifies the APIs to match those in Chart FX for .NET. The software costs US\$1,199 for a test or development server, and \$1,999 for a deployment server; upgrades cost \$399 and \$699, respectively.



## PEOPLE



VEREEN

BZ Media, the publisher of SD Times, has hired **Lindsey Vereen** as editor of the now-monthly Software Test & Performance; he had previously been group editorial director for embedded systems at CMP Media . . . SAG AG, the giant enterprise resource planning software company, has hired **George Paolini** to build a partner community around NetWeaver, its Java application server. Paolini, who will take the title of SVP for platform ecosystem development, had been VP and general manager for Java solutions at Borland . . . SOA Software—the company that until last month was known as Digital Evolution—has hired **Jnan Dash** as chief technology adviser. He had been group VP of systems architecture and technology at Oracle . . . The Association for Computing Machinery has given its Grace Murray Hopper Award, which recognizes a young computer professional, to **Jennifer Rexford**, a computer science professor at Princeton University, for her work on assuring stable and efficient Internet routing. Rexford became a full professor at Princeton in February. Sun's **Richard Gabriel** was given the ACM/AAAI Allen Newell Award for his role in shaping the growth and impact of object technology.

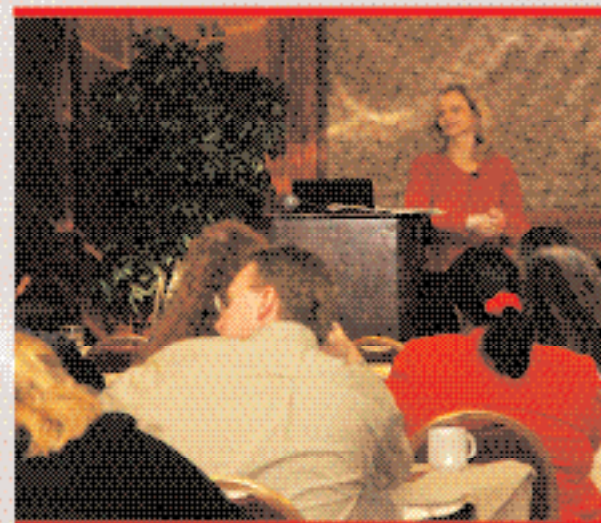
## STANDARDS

OASIS has approved the **Security Assertion Markup Language 2.0** as an official standard. This update fills in gaps in SAML 1.1 regarding the attribute profiles and metadata specification and agreements between businesses participating in a federation. It also adds new features for encryption, pseudonyms, privacy and user consent to information sharing. ■

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# OnWeb: Hosts Gone Mobile

NetManage extends mainframe access tool to J2ME, .NET devices

BY EDWARD J. CORREIA

Host integration company NetManage last month announced that OnWeb 7.2, its latest host-to-Web tool released on April 4, can now target devices equipped with Java and .NET runtimes, just days after breaking news that the tool also now simplifies the creation of so-called composite applications that access multiple disparate back ends through a single UI.

"OnWeb 7.2 lays the foundation to allow us to support a

range of capabilities around composite enterprise and mobile applications," said Peter Havart-Simkin, senior vice president of strategic development at NetManage. "Now one application can provide customer finance, ordering and logistics information on one screen in a composite process behind the scenes."

Though developers could in the past use the company's tools to access host applications through HTTP, Havart-Simkin said this is the first

time its tools create code that executes on the device. "The .NET Compact Framework really makes a difference in building enterprise class applications on these devices," he said, referring to Microsoft's device runtime. The tool also targets J2ME. Support for Qualcomm's BREW, Palm and Symbian operating systems is planned for mid-2005.

Havart-Simkin said that unlike other middleware-based solutions that cope with inter-

mittent connectivity using data synchronization, OnWeb delivers immediate data access. "With today's infrastructure, we [deliver] real-time interactive applications, and the OnWeb server takes care of all the intermittency and flaky connections" and can fall back on synchronization, when necessary, he said. "And those vendors have little or no credibility in terms of enterprise integration," he added.

According to Havart-Simkin, OnWeb 7.2 also now includes support for the characteristics of a variety of device types. "This we call scalable presentation. This is the ability to support PCs, browsers, PDAs and smartphones simultaneously," he said.

Pricing for OnWeb 7.2 remains at US\$8,000 per server or \$150 per concurrent user. Havart-Simkin described the developer experience using the tools, which plug into Visual Studio .NET or JBuilder: "Let's say I want to provide a connection to CICS, SAP and PeopleSoft. We let you connect to and browse those applications, grab the transactions you're interested in on a drag-and-drop basis and represent them within Visual Studio or JBuilder as the appropriate service," which he said could be a Web service, a .NET assembly or other programmatic component. "You're then able to develop the presentation and download it to the



OnWeb tools enable mobile devices to access multiple back ends from one composite Java or .NET app.

## Encirq Lays Data Foundation

Framework reverses client/server model for embedded systems

BY EDWARD J. CORREIA

Encirq in mid-March introduced the Data Foundation Framework, which combines new and improved tools that the company claims enable developers to create high-performance, small-footprint data management applications.

According to John Smolucha, Encirq's vice president of marketing, the current client/server model—an individual actively performing queries against a passive database—is beginning to reverse. "The new model we see emerging in the embedded space is data-active, human-passive," he said. Smolucha illustrated the point by describing the systems controlling a high-end BMW. "That car is a data generation platform [with] over 200 processors, all networked. The suspension, braking and adaptive cruise control systems are all actively generating data without a human being present to monitor it. In that model, data management becomes critically important," said Smolucha.

The framework, which costs US\$50,000 per development team plus volume-dependent royalties, consists of Encirq PL, a SQL-derived procedural language for building query logic; an application generator that converts PL into ANSI C; and the Prototyper utility for testing and debugging—all of which existed before and are unchanged. Also included is an updated version of Encirq's Streaming Data Engine, a sub-30KB set of middleware libraries for resource-con-



Its data management software runs on any RTOS or none at all, claims Encirq.

strained devices that process transactions and queries on real-time streams, manage tables and indexes, memory and storage, and import and export services.

One new component is the Common Applications Foundation, reusable and extensible application and interface code

that Smolucha said helps reduce the amount of time developers spend figuring out how to use the RTOS. "Our service libraries take care of a lot of that, so it reduces the load on the operating system and adds integrity and transaction processing." ■

## Third Time's the Charm for Nokia's Series 60

BY EDWARD J. CORREIA

Chief among the criticisms of Nokia's Series 60 API has been its lack of compatibility across devices. Nokia this summer will begin shipping Series 60 Platform 3rd Edition, which promises binary compatibility across devices, an improved security model and implementations of about a dozen Java and other specifications.

"This is a huge evolutionary jump in terms of functionality for the Symbian platform," said Victor Brilon, senior manager of Java market development.

Topping the list of implemented Java specs is the Location API for J2ME (JSR 179), which lets Java applications have

location-awareness. "For the enterprise, these APIs become critical when you start mobilizing a sales force or fleet services," said Brilon. The same functionality also has been implemented in the Symbian API, he said.

Also implemented are JSR 180's Session Initiation Protocol (SIP) spec, enabling mobile apps to establish IP sessions; the JSR 177 Security and Trust API; JSR 205's wireless messaging API to let Java apps send and receive SMS messages; and JSR 226, the Scalable 2D Vector Graphic API that Brilon said will also be helpful for location-based apps. "This ties into the Location API and lets you create map visualizations and other

scalable graphics and icons."

Nokia's newest compiler now produces executables that are binary-compatible across device platforms without a recompile, Brilon claimed, as long as those devices run the latest Series 60 operating system, which is based on Symbian OS 9. "That guarantees interoperability between applications and platforms [written to] Series 60 3rd Edition."

To help keep devices healthy and protect private data, Nokia also has introduced the concept of data caging. "There is certain file-system data that applications should not modify: the equivalent of the DLL files in Windows," Brilon said. "Unless explicitly allowed to do so, appli-

cations cannot change those files, and can only act on their own application space. Even a simple malicious application designed to steal data will now be inoperative." This adds to virus protections and security protocols now in place, he said.

Brilon said that a new capability model extends the Symbian Signed model to protect against unauthorized apps tapping into capabilities of other apps. "Anything that creates a billable or privacy event now requires permission if the app has not been certified as trusted beforehand. For example, if you have an unsigned application that wants to send an SMS, it will require user verification." ■

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# J2EE and .NET: So Alike, But Still Very Different

Feature for feature, the development platforms are virtual peers, but philosophically they remain poles apart

BY JENNIFER DEJONG

It's a long, slow cold war, with no winner in sight.

That's partly because the J2EE and .NET platforms are neck and neck in terms of what they let developers do, but also because a truce has been established between the two parties. Both camps have essentially called off the battle, opting instead to embrace the now firmly entrenched reality: Most companies have committed to both application development and deployment environments.

"I don't see either one taking out the other in the near future," said Henry Bowers, a director of product marketing for Mountain View, Calif.-based ILOG, which sells business rules management and other development tools for both environments.

Which one will win is no longer even a question, added Yaacov Cohen, president and CEO of San Jose-based Mainsoft, which sells J2EE and .NET interoperability software. In terms of training and skills, many companies would prefer not to support both development technologies. But the heterogeneous computing landscape is a reality, he said. "Companies have both. Banks are merging. One is .NET; the other is J2EE. And it's the same in [other industries]," Cohen said.

Some organizations know that they will never be a pure shop, added Tom



J2EE works well in some areas, and .NET works well in others, says WRQ's Bice. 'They bring a mixed bag to the table.'



Bice, vice president of product marketing at Seattle-based WRQ, which sells integration tools that tie Java, .NET and other applications to the mainframe. "So why fight it?" Instead, they develop a strategy around both platforms. J2EE may be more applicable in some areas, while .NET is a better fit in others, he said. "They bring a mixed bag to the table."

Asked to weigh in on the relative strengths and weaknesses of each platform, toolmakers that sell software for both said that many of the longstanding stereotypes—.NET on the desktop, and J2EE on the server—still hold true. They also commented on the cultural and business factors that have shaped and continue to influence each development environment, and noted how competition between platforms benefits both. One camp innovates and other responds, and the opposite is also true, said Borland's chief technology officer, Pat Kerpan. "We are moving toward a friendly fifty-fifty."

## POLES APART

J2EE and .NET offer a "semantically identical set of features," said Kerpan. But they are poles apart in terms of the philosophies that govern them. With the J2EE application server, there is a platform that sits up above the operating system, offering a large but complex set of capabilities. "Microsoft has never clumped [those capabilities] together in the same way," he said.

Put another way, the J2EE application server is essentially the next generation of APIs built into the operating system, added Roger Thornton, chief scientist at Palo Alto, Calif.-based Fortify, which sells application security tools that test code written in Java and the .NET languages, among others.

.NET's deep integration with the operating system accounts for the most obvious difference between the two environments: For the most part, an application developed in .NET will run only on Windows. But a J2EE application can also be deployed on Linux, Mac



Most .NET apps run only on Windows, says SlickEdit's Westfall, but a J2EE app can be deployed on Linux, Mac OS, Solaris and Unix.

OS, Solaris and Unix without having to be recoded, said Scott Westfall, director of software development for SlickEdit, a Morrisville, N.C.-based company that sells editing and debugging tools for Java and the .NET languages, among others.

That flexibility is a great thing, said Kerpan. "But if all I need is access to the message queue, Java can be unnecessarily complex."

That Windows-only drawback is also .NET's greatest strength. It beats J2EE hands-down on the desktop, industry experts acknowledge. "Microsoft has a huge edge on Java [in terms of] visual development for the front end," said Mike Sawicki, OptimalJ product manager at Detroit-based Compuware, which offers J2EE and .NET development and testing tools.

Java presentation layer technologies AWT and Swing still have a tough time integrating with Windows, added Daniel Selman, a product manager at ILOG. .NET is also easier to use, enabling developers to accomplish more, faster, they say. Compared with JavaServer Pages, ASP.NET is more productive, said Ken Cowan, product manager for Compuware's DevPartner offerings for .NET.

Thanks to wizards and prewritten code in Visual Studio, "you can get

► continued on page 30

# J2EE, .NET: Peers But Still Poles Apart

◀ continued from page 29

something up and running in .NET quicker than in Java," echoed Colin Doyle, a product manager at Waterloo, Ontario-based MKS, which sells configuration management and other tools for both environments. In terms of coding, database access, even installation, .NET is easier to use, added Mainsoft's Cohen. "Try to install JBoss or Eclipse. You have to be a computer scientist."

## STEREOTYPES STILL APPLY

To some degree, that longstanding stereotype—Java is for computer scientists, while Microsoft caters to programmers who learned to code in Visual Basic—still holds. But today it's largely a misperception. "Java developers tend to be more skilled," said Joe Fernandez, a director of product marketing at Empirix, which sells testing tools for both Microsoft and Java developers. But while



The .NET camp has been hurt by product delays, particularly that of Longhorn, according to ILOG's Cortez.

.NET is easier to use and offers more productivity tools, building serious enterprise applications in either environment requires a high degree of skill, he said.

"But when you hire a trained J2EE developer, you know exactly what skills that person will have," said Compuware's Sawicki. "You are working against a standard." By contrast, as a group, Microsoft developers possess a wide range of programming abilities, he said.

J2EE's key strength is that it is more mature and is perceived as more enterprise-ready than .NET, said Jonathan Cortez, a product manager at ILOG. Despite the gains .NET has made in the enterprise, questions about the scalability of applications built in the Microsoft environment persist, he said. It's a stigma based on earlier evolutions of the technology, he said. "But the perception has been inherited."

J2EE is also perceived as more mature in terms of mainframe integration, said Compuware's Cowan. That capability is built into the J2EE stack, he said. But he noted that .NET also provides mainframe integration support through its Host Integration Server.

J2EE's strong hold on the server and .NET's tight grip on the desktop have led to what Fortify's Thornton calls a standard blueprint in the enterprise development landscape today: .NET client going through Web services to J2EE on the server. "When you walk down Wall Street, you keep tripping over that architecture." For Microsoft,



Building serious enterprise apps in either environment requires a high degree of skill, says Empirix's Fernandez.

that has been an entry point, he said.

One area in which J2EE and .NET are both weak is data access, said Chris Keene, vice president of caching for ObjectStore, a division of Bedford, Mass.-based Progress Software. "Both are trouble but for different reasons." .NET's ADO.NET still forces developers to write a lot of code to overcome the row and column limitation of accessing a relational database. In the J2EE camp, there are so many data binding standards—JDBC, JDO, among others—that aim to solve this problem, it's not clear which one will prevail. ObjectStore provides data access and caching tools for both development environments.

## DEMOCRACY? BENEVOLENT DICTATOR?

A host of cultural factors also holds sway over the two development environments.

".NET is a benevolent dictator, and Java is a democracy," said ILOG's Selman. And both forms of government have drawbacks.

The J2EE development community is big, dynamic and active and offers hundreds of open-source tools, such as Hibernate, Ant and JUnit, which are only just now making their way into the .NET camp, he said. And while the Java Community Process is democratic, it's also slow and chaotic. "It's like herding cats," Selman said. Java vendors—BEA, IBM, Oracle, Sun—have their own agendas, and that spills over into the process and slows innovation.

The .NET camp has problems of its own. It has been hurt by product delays, particularly that of Longhorn, said ILOG's Cortez, noting that Microsoft does not expect to deliver the next generation of Windows until 2006. "There was great excitement among developers when Microsoft first talked about Longhorn late in 2003," he said. And some of that momentum has been lost.

What's more, Microsoft is still an all-Microsoft environment, said Chris Fedorko, vice president of product management for Burlington, Mass.-based Klocwork, which sells testing and other tools for both development platforms. "If you are pure Microsoft, there are magical things you can leverage, such as the ability to integrate with other Microsoft servers and applications, such as Office." If you commit to Microsoft, there is a lot to take advantage of, he said.

"But .NET has a fundamental problem," added Adam Kolawa, CEO of Monrovia, Calif.-based Parasoft, which sells testing tools for J2EE and .NET. "It's an all-or-nothing strategy. And in my view, people are not going to lock themselves into one environment."

## NO GODZILLA VS. RODIN

As Microsoft prepares to deliver Visual Studio Team System, its life-cycle development platform expected this summer, the competition may move to a new arena: Team System versus Eclipse.

"The openness of Eclipse has forced Microsoft to open up Visual Studio," said MKS' Doyle. "With Team System, Microsoft has put in more APIs that make it easier for vendors like us to expose our products in Visual Studio," he said. In the past, third-party vendors had to do more of the integration work themselves.

However the J2EE versus .NET drama plays out, things have turned out better than expected. "If you think back to the initial fears, before Microsoft released .NET, [the industry thought] this would be Godzilla versus Rodin, and we would all be collateral damage from the war between the two," said Borland's Kerpan. "It's evolved more positively than that." ■

## When One Leads, the Other Is Sure to Follow

BY JENNIFER DEJONG

The future for J2EE and .NET is likely to look much like the past: When one camp innovates, the other will follow.

From the way garbage is collected to the way RAM is managed, the development platforms are more than 90 percent identical, said Fortify's chief scientist, Roger Thornton. "Innovate in one, and you can know in days what to do in the other."

For instance, single sign-on—the ability to manage end-user authentication and authorization across multiple applications—originated in Java and soon after appeared in .NET, he said. That trend is likely to continue, to the benefit of developers in both camps.

But the "keeping up with the Joneses" approach is not likely to result in radical change, or to the production of the next big thing. "It's like adding another blade to a Swiss army knife," said Chris Keene, vice president of caching for ObjectStore, a division of Progress Software. The knife is a little bit better, but maybe the knife itself wasn't the best way to solve the problem

in the first place, he said. It's difficult for either camp to move beyond the "add another blade" approach.

But conventional wisdom suggests that innovation is more likely to originate among members of the J2EE community, where vendors such as BEA, IBM, Oracle and Sun are accustomed to going up against one another for customers.

But Keene said that's not so. "J2EE has become such a big, bloated standard, vendors that support it are spending a lot of money simply complying with it."

Microsoft, too, is locked in to keeping pace with its rivals, he said, acknowledging that Microsoft and IBM clearly have the money to go toe-to-toe with each other. "Innovation will come from people who take a different cut on the problem." And in Keene's view, none of the big players has demonstrated a willingness to do that.

Or perhaps the future for J2EE and .NET isn't about technical innovation at all.

Thornton believes the competition will shift to the services front. "If you go back over time and look at IBM's revenues

from servicing corporate America, it's an insane amount of money." It's obvious that there is a certain amount of money that large companies will shell out to develop and manage the applications that keep their business running, he said. "It will be fascinating to see what happens." ■



The keeping-up-with-the-Joneses approach is not likely to produce any radical change, says ObjectStore's Keene.

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## EDITORIAL

## Assessing Novell

Today's Novell is an entirely different company than the one behind NetWare, the one-time ubiquitous server operating system noted for its ultra-dependable operation, lightning speed and inscrutable APIs.

It's a different company than the one that tried to go mano a mano with Microsoft by developing its own competitor to Office, spending more than US\$1.5 billion in the early 1990s to build a suite around WordPerfect and Quattro Pro. After failing miserably in that quest, and dumping that suite in 1996 (selling it to Corel for \$10 million), Novell simply drifted. NetWare lost ground to Windows NT Server, and new versions of NetWare were slow, buggy, unstable and increasingly irrelevant.

Only a few years ago, the company's most valuable property was Novell Directory Services, an identity management system that tried to compete against Microsoft's Active Directory. Considering that Novell lost out to Microsoft in two high-stakes battles, few thought Novell would win this conflict either.

Since the late 1990s, Novell seemed destined to simply fade away into a footnote of the computer industry.

But, now, Novell is a different company again.

Novell is in a stronger position than it has been for a decade. Through three shrewd acquisitions, the company has successfully reinvented itself as a commercial open-source powerhouse: The Ximian desktop and management software is a leading contender as a mass-market user interface for Linux. The Mono project is a strong open-source runtime for running a subset of .NET applications—at least, those that conform to the ECMA/ISO standards. SUSE Linux is a top Linux distribution with a particularly strong reputation in large enterprise data centers.

The question is: What is Novell going to do next? If history is any guide, the company's combative founder, Ray Noorda, would have taken the company back into battle against Bill Gates, positioning SUSE Linux, with the Mono .NET runtime and Ximian user interface, against Windows XP and Windows Server 2003. And if history is any guide, he would have lost again. Linux simply isn't strong enough to make a frontal assault against Fortress Windows, and Microsoft enjoys a tremendous monopoly advantage in its relationships with desktop and server hardware vendors.

Fortunately, Ray Noorda is no longer running Novell. The new boss is Jack Messman, a much cooler head who seems to be focused on expanding the technological breadth and enterprise depth of the company's offerings, as well as expanding Novell's partnerships with companies like IBM and JBoss. With Messman's background in services (he was CEO of Cambridge Technology Partners, which Novell purchased in 2001), we expect him to take a go-slow approach to building up Novell's product portfolio, improving its reputation as a serious open-source player, and creating more relationships with other industry players.

If Novell can manage its recent growth carefully, it could complete its transformation into a leading platform player—and, potentially, as the leading provider of a complete commercial-grade Linux platform. Then, and only then, would it be ready to tackle Microsoft again. ■

## They Fight as One

I earn my livelihood as a software development manager, and my hobby is collecting and retelling traditional Jewish stories. Inevitably, as I attempt to integrate the various aspects of my life, my hobby has "bled over" into the workplace. Over the years, I've used Jewish tales in a variety of management contexts—to analyze a situation, to convey a point, to motivate a team. I've found that these stories contain a world of timeless insight and wisdom about people, and with all due respect to PowerPoint and Project, management is mostly about people.

For example, I once took over a team of 12 engineers whose previous director had managed all 12 of them directly, but had promised each and every one a promotion to group leader. I devoted my first day on the job to meeting with each engineer individually.

Irena, a senior team member, spent her hour describing the failings of her colleague Serge. I left the meeting convinced that, despite her seniority and technical expertise, I could not, in good conscience, allow her to manage a junior engineer.

My next talk, with Serge, was more of the same. He related anecdotes about Irena's failings

as an engineer and as a human being. He boasted of the technical problems he had solved single-handedly. I walked away convinced that he was an important individual contributor, but I saw in him more ego than management skills.

Next up was Mary, a junior engineer. I asked her to tell me about an accomplishment she was proud of. She told me about how she had successfully absorbed a new member into the team and brought him up to speed.

Although Mary was not the top expert on the company's products, she was competent and enjoyed mentoring and sharing information.

That evening, mulling over these discussions, I recalled a story I had told my children several weeks earlier, about Rabbi Haim of Volozhin, a Russian rabbi who lived during the turbulent days of the Franco-Russian War.

Napoleon's early successes in the conflict put Jewish leaders in a delicate position. Some rabbis living under the oppression of the czar's rule welcomed Napoleon as a savior, but others worried that the French Enlight-

enment would undermine the rock-solid commitment of Russian Jews to their faith. Most rabbis adopted a policy of neutrality, waiting to see which side would emerge victorious.

As Napoleon's army swept through Russia, a French general who stopped in the town of Volozhin requested a meeting with the famous Rabbi Haim, known far and wide among both Jews and Gentiles for his wisdom in worldly affairs. The rabbi was reluctant to be drawn into a political discussion, but as an invitation from an occupying general could not be declined, Rabbi Haim went to the general's headquarters.

The two men discussed various religious matters and each was impressed with the other's erudition. Finally, the general asked Rabbi Haim, "You have a reputation for wisdom in worldly matters. Do you think the French army will defeat the Russians? Please tell me the truth."

"If it is the truth you seek," replied Rabbi Haim, "then I must tell you that I believe the Russians will win the war."

"I appreciate your honesty, Rabbi," said the general. "But as

Moshe Kranc



By Invitation

## Letters to the Editor

## LIKE NOTHING ELSE

Allen Holub, in his recent column titled "Is Software Engineering an Oxymoron?" [March 15, page 28], suffers from an insecurity problem pervasive in our industry: the need to draw analogies to other older, more established professions.

While in the past, I too have fallen to the alluring temptation of analogies, I now realize they tend to oversimplify, overgeneralize, only touch the surface similarities and remove one from fixing the actual problems. Furthermore, we end up wasting time on deciding which is the better analogy: Are we more like bridge-builders or carpenters? Like scientists or creative painters? Molecular biologists or pastry chefs?

Perhaps it is a problem in many young professions, but I have now come to the conclusion that comparing software

development to engineering, craftsmanship, science or art is a futile exercise. Nobody compares engineering to craftsmanship, saying one should be more like the other. Nobody asks why science is not more like art. Why do developers feel compelled to do this with our field of software development?

Software development is superficially like all of them, and in detail like none of them. (This can be said of any profession, in fact.)

Maybe it's time we all drop the distraction of analogies, and like good software developers, explore our shared problem space, as we are trained to do, and come up with our own solutions that fit the problem, without necessarily looking to other professions for guidance. My inclination is to think that, as stakeholders in the problem space of software development,

that energy would be better spent describing the problem fully and then finding specific solutions that come out naturally from the problem defined, rather than shoe-horning ourselves into the shoe of another profession.

Paul Tiseo

CEO & Senior Consultant  
Metacode Studios

Mr. Holub might receive some flamed responses to challenging the sanctity of mathematics as the true foundation of computer science, but as a math major and now a computer science Ph.D. with lots of experience in aerospace, I'd say there is some truth in what he says. We need to think creatively and sometimes painfully give up old ideas that constrain our views and solutions. I offer the following corrections—I mean comments:

1. Computer science may not

a military man, I assure you that the French forces have far superior training and equipment. Our army is made up of the finest soldiers in the French Empire. The Russian army is a ragtag band of untrained peasants."

"With your permission, I will tell you an incident that I witnessed when I was a boy," said Rabbi Haim.

"A baron's luxurious coach drawn by four powerful thoroughbred stallions sunk mired in a swamp. The coachman whipped the steeds furiously, but no matter how the horses labored, the coach did not budge.

"At that moment, a local farmer happened by in a simple wagon pulled by two nags. To the baron's surprise, the farmer maneuvered his wagon around the coach and through to the other side of the swamp. 'Stop,' shouted the baron to the farmer. 'Please tell me, where did you find such remarkable horses that can traverse this mud with ease?'"

"The farmer laughed, 'Your Lordship, there is nothing remarkable about my nags. Your pedigreed horses are far more valuable than mine, and that is precisely your problem. Each of your horses wishes to prove to the others that it is the strongest. So, when one horse pulls, the other horses do nothing, because they do not wish to help the other horse succeed. My poor nags may have no pedi-

be structural engineering, but there are just as many economic, health and ethical issues. We need to realize that most of the CPUs in use today are in embedded systems (not desktops), and some of these programs require hard, real-time deadlines, such as to control spacecraft costing billions, monitor health equipment saving lives, and execute programs deciding credit applications. Computer scientists do more than express themselves creatively. They have engineering responsibilities that must be recognized.

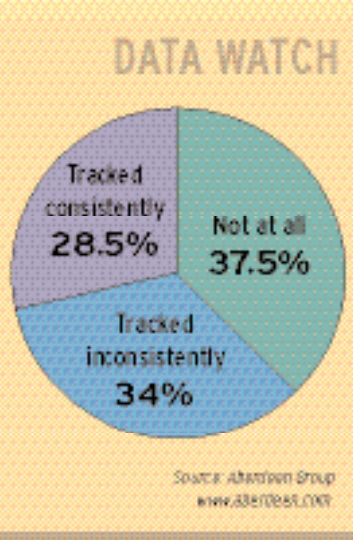
2. Computer science is more than programming. The systems we (e.g., in aerospace) build are getting so large and complex, working only in a programming code domain is woefully inadequate. Techniques to represent, model and analyze architectures in automated ways are absolutely essential. The scope and effort of this go way beyond programming. Not long ago the areas of testing and maintenance of com-

## Is Your Company Managing Its Security Spending?

Would it surprise you to learn that your company could increase its bottom line by as much as 7 percent if it employed security best practices in use by leading companies?

That's according to Aberdeen Group's Security Spend Management, a benchmark report published in December 2004, which also found that more than two-thirds of companies either don't track their security spending or do so inconsistently, rendering them powerless to focus security efforts on appropriate business pressures, such as down time due to viruses, worms, spyware and other Internet threats, the study said.

More than 210 companies from diverse industries were polled via the Web-based survey. Most respondents were based in North America and Canada and had revenue of less than US\$50 million.



gree, but they grew up together, and when they pull the wagon it is a joint endeavor."

"With all due respect, General," continued Rabbi Haim, "I believe this is the problem of your army. Your soldiers are well trained and have excellent pedigrees, but they come from diverse backgrounds and each soldier fights strictly for his own glory. Not so the Russian army. They are all one nationality, and each member fights for a common cause—their homeland. They fight as one. This is why I believe that the Russian army will win the war."

The ensuing years proved Rabbi Haim's assessment to be correct.

Mulling over this story, I had to agree with Rabbi Haim—the winning team may not be pedigreed, but it pulls

together. A group rarely fails due to a lack of talent. Often there is too much of the same kind of talent, but not enough cooperation among the team members. Staffing a team with superstar individual performers is not the formula for success. A productive team pulls together because each member truly wants the others to succeed, and is willing to help in any way possible.

### BUILD PEOPLE UP

Recalling the day's discussions, I tried to formulate what I was looking for in a group leader. It wasn't superlative engineering skills, although technical competence was a must. I decided on a rule of thumb: A group leader must be someone who enjoys building people up rather than tearing them down.

That's the kind of person I want to manage me, and that's the kind of manager I'd trust to mentor a new employee.

A couple of weeks later, Irena was flattered when her previous boss asked her to join him in sales, and Serge was pleased when I promoted him to chief technology officer for the group, with solo responsibility for solving thorny problems. With the way now clear, I promoted Mary to group leader, a role she performed with great success. ■

*Moshe Kranc is vice president of research and development for Zoomix, a Jerusalem-based software company, and recently published his first book, "The Hasidic Masters' Guide to Management" (www.hasidicmanagement.com).*

puter programs were largely ignored in academia. Today, UC Irvine is a premier school in software engineering.

3. Holub's view that computer science is no longer just the study and implementation of algorithms is true. However, it is not just about creating documents, or simply a move from math to English. Computer science includes all the challenges in solving problems with computers.

The realization of computer science's potential will come from blending computer science with English, linguistics, economics, biology, psychology, physics, mathematics, etc. Computer science curriculums (and the academic politic) need to promote this. This emergence will likely occur at smaller universities first.

I had the opportunity to see presentations from an innovative, English-computer science interdisciplinary class on multimedia that was conducted at Loyola Marymount University. One pre-

sentation created an incredibly novel user interface based on listening to a story from a radio station, in which the listener interest influenced a changing story. It was clear that the highly creative user interface came from a synergy between the liberal arts and engineering majors.

Holub's paradigms of computer science as creative writing, and UML as symbolic linguistics are also useful and highly relevant. More educational institutions should consider Holub's paradigms in broadening their approach to teaching computer science.

### Phillip Schmidt

Senior Engineering Specialist  
The Aerospace Corp.

### FIRST THINGS FIRST

I truly felt close sentiment with the editorial in your March 15 issue ["Sending a Message," page 28]. I've been using Microsoft's development tools for quite a while now, after having dabbled in Java for a short bit, and

previously having used C/C++.

As the CFO/CIO for a small construction company, I have to continuously review the latest technological advances to ensure we make the right choice to fit our needs. While IDE development tools such as Microsoft's Visual Studio are marketed under the ideal of quicker productivity, these same tools also breed laziness and ensure dependence.

After the recent fiascos of Microsoft announcing its end of support for Visual Basic 6.0, and Sun's previous May announcements of its abandonment of the JDO spec, many of us programmers/management

► continued on page 35

### CORRECTION

In a story in the March 15 issue, BEA was incorrectly described as taking over the Eclipse Web Tools Project. BEA actually will be co-leading the project with Christophe Ney of the Object-Web consortium.

# SDTimes

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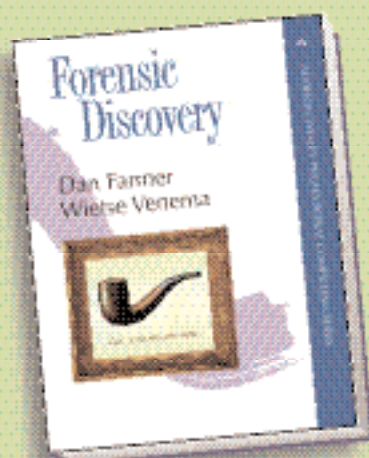
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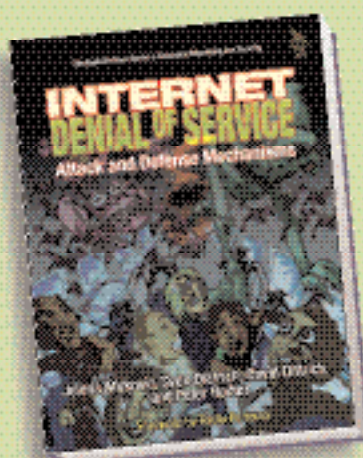
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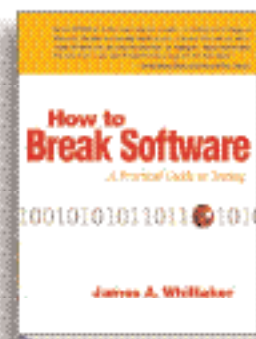
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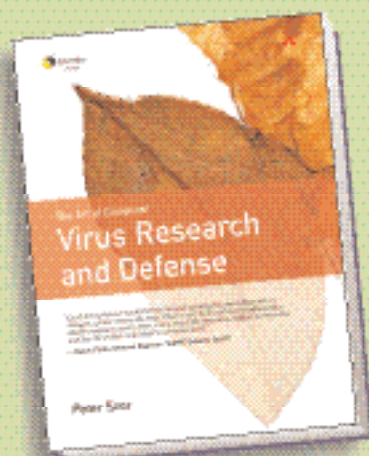
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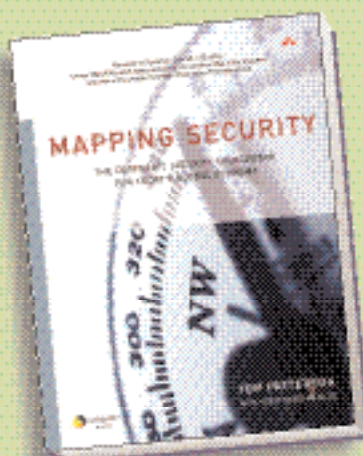
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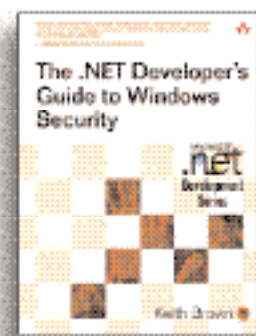
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# What Happened to Tool Prices?

In my capacity as a judge for the annual Jolt awards, I spent much of February and March this year reviewing software development tools. Installing nearly 40 products and putting them through their paces was as corrosive to my perseverance as it was to my Windows workstation's registry structure. However, seeing so many products in quick succession conferred a perspective that is otherwise exceedingly hard to come by. In most years, this perspective has been no more than a refresh of the state of the art; but this year, it became clear that development tools have changed in important ways.

The first and most conspicuous change is pricing. What happened to products that cost less than \$1,000? This depopulated pricing tier has given way to a three-level scheme: free (as in beer), the \$1,000-to-\$5,000 bracket, and then amazingly expensive.

Let's start with amazingly expensive. In this category are products such as Coverity's very good code-checking program, which costs tens of thousands of dollars *per project*. Fortify Software's flagship product that checks code for security problems in code runs US\$56,400 per CPU it's run on. That's the price for a one-year subscription. They're both great products,

but yowza, look at those numbers!

The bracket below is populated with products that are viewed as high-end (such as the top-of-the-line IDEs from IBM and Borland) or unique. One aspect of this pricing strategy is that it implies that products in the \$1,000 range are not really worthy.

Personally, though, I think the \$500-\$1,000 band of the spectrum is the sweet spot. In this range, you'll find IntelliJ IDEA from JetBrains, Oracle's excellent JDeveloper, Adobe's Creative Suite (Illustrator, Photoshop, Go Live, In Design and Acrobat), many Macromedia products, as well as midrange Borland and Microsoft tools. In general—that is, nearly always—these entrants will have all the functionality you need.

Initially, I figured that the open-source movement was putting so much pressure on the market, that vendors had to charge more to stay profitable. Interestingly, no vendor agrees. Most point to the big jump in the cost of Microsoft's Visual Studio .NET environment as the event that opened the floodgates. And once customers showed they were willing to pay the new, higher prices, most vendors jumped on the

bandwagon. Actually, swamped the bandwagon might be more like it.

The second observation is that with the exception of Seapine (especially!), Serena, Perforce and Adobe (for a few products), no tool vendor issues printed documentation anymore.

This is really an unfortunate devel-

opment. Paper documentation serves many purposes that electronic reference cannot replace—not least of which is the ability to read through the docs sequentially and carefully learn the ins and outs. Today, you must print a PDF file to paper sheets, collate those, and read them in a stack, as you would a legal brief. What is galling about this switchover is that when vendors began discontinuing paper documentation, they all said it was a cost-savings move.

In light of today's product pricing, this is nowhere near true. To the vendors who still value paper docs, please keep printing and shipping them. If you discontinue shipping them with the products, then please make them available as a separate purchase item.

The number of vendors that require registration and product activation rose

## Integration Watch



Andrew Binstock

distinctly this year. I expect this practice will become the default fairly soon. I don't like this development because it puts me at risk for having to relicense software if I change certain unknown elements of my system, such as the disk, the network card, the amount of RAM. On any given workstation, I might upgrade all three. Now, though, I have to worry whether this change will force me to pay for a new license, or what terms will be imposed on me when my license file does not match the vendor's hash code for my upgraded hardware.

I don't want to sound entirely negative. Overall, feature levels were up significantly, and products tended to be smoother, more predictable and accompanied by useful tutorials.

One product category really stands out for quality and good prices: books. As many of us know, even 10 years ago, buying a programming book was a crapshoot. It could be a winner or a stinker. Today, there are few stinkers and many, many excellent books. Addison-Wesley, Apress, Morgan Kaufman and O'Reilly & Associates consistently deliver tome after tome of great stuff, with very few dips in quality. Moreover, book prices have risen only modestly during this time frame. If tool vendors could do more of what book publishers do, your life and mine would be a fair bit easier. ■

*Andrew Binstock is the principal analyst at Pacific Data Works.*

## Letters to the Editor

◀ continued from page 33

are left feeling like pawns in a market-share chess game.

Do I tell my staff that instead of taking care of the payables and doing the billing, we're going to be building our own operating system and relational database? While we try to shape our business's growth, we have always felt the pressure and fear of vendor lock-in. Because while we have our own business goals in mind, Microsoft and Sun have theirs.

While capitalism drives progress, it does little to ensure solutions. In my younger days, I foolishly thought that Microsoft, IBM, Sun, etc., pursued the ideal of building the best solution for every customer—"If you build it, they will come."

I realize now that it's more about cornering the market than providing interoperable solutions—"They will come, as long as they have nowhere else to go."

**Ralph Loizzo**

Archon Construction

### LOVE OF DELPHI

In his March 1 column ["Is Borland Relevant Anymore?" page 45], Andrew Binstock said Delphi is an "oddball" product.

Explain what is odd about an outstanding product that is built around

Pascal, what was once the primary "teaching" language of university computer science departments that might still be using Pascal if Delphi had appeared a few years earlier.

Instead, the geniuses that rule computer science departments switched en masse to C, a language that is orders of magnitude more difficult to comprehend than Pascal, much less program in, without any significant advantage in terms of speed or capability.

As a longtime Delphi user (over seven years) and an old-timer (having started with Fortran in graduate school in the mid-1970s and in my one computer course back in 1965), I owe the fact that I am a professional programmer to Delphi.

The Borland implementation produced an IDE second to none, complete with a wide array of useful components, supplemented by an enormous third-party community of commercial, freeware and shareware components that make application development a breeze. There is literally nothing I cannot develop with the tools Delphi contains, plus those available for free or very reasonable cost.

And if I need to develop my own components, extend the capability of existing components, or dig out something in the guts of Windows not provided by Delphi,

the ability to do so is there, providing one is willing to learn how to do it.

It was difficult for an old-timer like myself, an engineer with virtually no formal computer science training, to make the transition from procedural languages such as Basic and Clipper to a fully OO language like Delphi, but it would have been impossible if there was nothing but C/C++ at the time.

I found Delphi to be wonderful for developing database applications in record time, programs that ran fast, were relatively easy to debug, and were remarkably stable. The learning curve for Delphi is far shorter than anything Microsoft has, and Delphi is far more powerful than any other RAD language without sacrificing any power versus C/C++. The Delphi object model is far more intuitive and far easier to work with than C/C++ and less kludgy than VB.

I have heard it said that any competent Delphi programmer can do the work of three C/C++ programmers, man-hour to man-hour. If anything, that statement is conservative. As a one-man shop working for a law firm, I am developing a soon-to-be commercial application for the debt collections industry. Such an application would have taken a whole department of C/C++ programmers.

Delphi is such an "oddball" product that Microsoft had to steal its chief architect away from Borland in order to come up with .NET. Indeed, much of C#/NET is modeled on what Delphi has had for many years. Should Borland and Delphi go belly up, it will be a great tragedy for programmers, even for those poor souls who believe the sun rises and sets on Microsoft. Unfortunately, Borland is not the master of its own destiny, as it has to move in the direction dictated by Microsoft.

Borland has its faults. I am still angry about Kylix, which I purchased for a small fortune, only to see it wilt away. However, I understand that Borland is a small company with limited resources and is unable to cover all of the bases at once. Despite being burned by Borland at various times, I owe my career to Delphi, and have to hope that it will survive at least until I retire. There is a good chance of that, considering that people still use COBOL and there are object-oriented versions of dinosaurs like Fortran.

**Mark J. Wallin, Ph.D.**

IT Director

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# What's Not Coming in Mustang

Java's next "Mustang" (Java 6) release has finally entered the JSR process (JSR 270: [www.jcp.org/en/jsr/detail?id=270](http://www.jcp.org/en/jsr/detail?id=270)). This column is the first of several that will look at the proposed changes.

Rather than providing an integrated approach to the new release, Mustang is just a collection of 11 existing JSRs, each with its own expert group. These groups are essentially autonomous. The reality is that there's no overall architecture, and more to the point, there's no architect coordinating the Mustang work.

This lack of guidance is a significant problem. Here's an example.

I talked recently about my concerns with Sun's documentation for the annotation-processing tool (apt) that ships with Java 5. The apt APIs aren't even part of Java; they're in a `com.sun` package. JSR 269 (part of Mustang) defines a Pluggable Annotation Processing API, and will presumably fix this last problem. JSR 269 will probably break your existing code, though; it "is targeting the same general functionality as the apt tool...[but] it is expected the API included in this JSR will resemble but not necessarily be compatible with the existing apt API."

It gets worse: "Users of apt have identified several limitations to the API;

this feedback should be considered by the expert group." Note the phrase "should be considered," not "will be incorporated into the standard."

Even if JSR 269 miraculously does improve the quality of the API, it doesn't solve the real problem: apt is a kludge. To effectively perform compile-time annotation-processing, you need hooks into the compiler itself, not a preprocessor that mimics a compiler by giving you partial access to a limited set of syntactic elements. As it stands, apt can't be used to actually modify the behavior of the compiler.

Consider an `@property` attribute, used to simplify a class that will be used in a program that requires the existing JavaBeans-style getter/setter idiom. The compiler should automatically generate `get/set` functions for you when it sees an `@property` applied to some field. The best you can do with apt, however, is create a brand-new java-source-code file for a class that wraps the one you're actually processing, and then compile that file externally. The wrapper class must have a different class name than

the class you wrote, and it won't integrate cleanly with your program. As it stands, apt just doesn't do the job.

To solve this problem, you need hooks into the compiler that let you effectively modify the source code (or the generated bytecode) to reflect the needs of the annotation. To do that, you need access to, and the ability to modify the structure of, the program. Technically, you need access to the abstract syntax tree (AST) that's used internally by the compiler.

Mustang includes a compiler API, but the JSR 199 and JSR 269 folks are not integrating their efforts. The compiler APIs will do nothing but let you run the compiler from within a Java program. This way a program can extend itself by writing Java source code, which it compiles and executes internally. You can also use the compiler APIs to compile and run customer-supplied "scripts" written in Java, saving you the trouble of inventing and implementing a custom scripting language. This ability is useful but not sufficient.

Coming back to the problems of annotation processing: The apt pre-

## Java Watch



## Basically, It's an Uprising

"A long habit of not thinking a thing wrong, gives it a superficial appearance of being right, and raises at first a formidable outcry in defence of custom. But the tumult soon subsides. Time makes more converts than reason," wrote Thomas Paine, 1776's A-List blogger. Whether Paine programmed in COBOL or Algol is a matter of fierce historical debate, but certainly his rebellious sentiments have found a sympathetic ear in the Visual Basic 6 community.

For more than a decade, Microsoft promoted Visual Basic as the foremost high-productivity language for the creation of personal and departmental corporate applications.

But then, three years ago, as part of the first release of .NET, came Visual Basic .NET. At the language level, VB.NET differed from VB6 by being completely object-oriented, having different exception handling, and by eliminating a number of VB6 constructs, such as the `set` keyword and default properties.

More significantly, VB.NET used the new Base Class Library, which though far more capable and internally consistent, was undeniably large and daunting. Microsoft knew it was going to take its lumps on the incompatibilities. Even so, in retrospect it is clear that Microsoft underestimated the attachment of many to "classic VB."

For 10 years, those who were arguably Microsoft's most loyal programmers (not for them the potential to hop platforms that comes with a knowledge of C++ or Java) had built innumerable applications based not just on the syntax of VB, but on the premise of "getting things done" with VB.

For many of those involved in these legacy VB projects, VB.NET seemed to have a value proposition antithetical to the VB culture: "Put in a lot of work to upgrade your code's infrastructure."

Does object-oriented programming provide benefits for conceiving, discussing and evolving systems? Does the Base Class Library provide more consistency across subsystems and give programmers more leverage across languages and projects? Is the exception-handling mechanism of .NET more consistent and robust?

To these questions, many in the VB community responded: "Who cares? I have a large system that my company has already paid to develop. Why should my company pay to 'port' the functionality in .NET?" The too-early revelation of WinFX at the 2003 PDC didn't help, creating a classic case of paralyzing fear, uncertainty and doubt as to whether an investment

in WinForms was worthwhile.

The recent milestone of VB6 passing into an era of paid support ignited a firestorm of protest in the VB community.

Until the end of March this year, those with VB6 had, depending on how they received the product, no-charge access to support for two to four incidents relating to the VB6 IDE. No longer. Henceforth, until 2008, Microsoft will continue to support the VB6 IDE but will charge for it, "[and] we'll have custom support contracts available through 2012," according to corporate vice president S. Somasegar.

This was the touchpoint for a dramatic uprising within the VB community. More than 200 MVPs (developers designated by Microsoft as being particularly influential within their communities) and several thousand rank-and-file developers have signed an online petition calling for the revitalization of unmanaged, COM-based VB and Visual Basic for Applications.

Karl Peterson, one of the MVPs who initiated the petition, told me that "symbolically, Microsoft is telling their customers that their data is disposable, and that 'it's way too soon to be ending support for 'the most popular programming language ever,' given that millions of

processor is "based on javac," which is to say that it's a hacked-up version of the compiler. JSR 269 and 199 are both working on modifications of the same, javac, source code. Why are they separate JSRs at all?

The ability to modify the AST is essential in an annotation processor, and apt cannot provide this ability unless it replaces the compiler altogether. Moreover, the JSR 199 effort is concerned with exactly what's needed to solve the annotation problem—exposing APIs that let you access the internal workings of javac. The apt effort should be abandoned entirely, and access to the AST should be provided in the Java 6 version of JSR 199, not in some "future version" (something that the JSR promises).

This wholesale restructuring of the JSR process is unlikely, though. Sun seems unwilling (or unable) to provide the architectural guidance needed to bring the anarchic JSR process under control. Instead of an orderly evolution, we get a bunch of uncoordinated projects tacked onto the language as an afterthought. Java needs an architect (or a committee that serves this purpose) who can direct the various JSR expert groups so that they can work toward a common goal. ■

*Allen Holub is an architect, consultant and instructor in C/C++, Java and OO Design. Reach him at [www.holub.com](http://www.holub.com).*

developers are still using it."

The petition is being taken very seriously within Microsoft, with carefully worded "we feel your pain" statements from virtually the entire management hierarchy. After addressing the support transition, senior vice president Eric Rudder in an online chat said in regards to a revitalized COM-based VB environment within Visual Studio: "Here, we have been clear that this is not currently in our plans. I know this disappoints many folks, but I think it's important to set expectations correctly. We want to do a great job on security. We want to do a great job on productivity. We want to continue to innovate in key areas like Data Access. For these areas, we are betting on VB.NET."

That's as close to a definitive refusal as an executive will ever speak. At the moment, it appears that the VB conflagration is on the cusp of becoming self-perpetuating. With both camps clearly polarized, the VB community is at a crossroads. Will they continue to protest until Microsoft backs down? Will they decide that their resistance is irrelevant and embrace VB.NET?

Or, will they decide that Microsoft has betrayed their loyalty and search for alternate high-productivity environments, such as REALBasic, or in the worst scenario for Microsoft, tools from the Java and open-source communities? ■

*Larry O'Brien is a technology consultant, analyst and writer. Read his blog at [www.knowing.net](http://www.knowing.net).*

## Windows & .NET Watch



# That Feeling of Insecurity

Four years ago, you couldn't find a book on secure programming. Colleges didn't teach security. There were no conferences, such as the just-concluded Software Security Summit from BZ Media, the parent company of this newspaper, at which software security was discussed.

Today, of course, all that has changed. Thanks to initiatives by the U.S. Department of Homeland Security and major financial institutions, among others, security has become a hot-button issue in the software development industry.

Where the security focus once was on firewalls and passwords, it has shifted into the development space. Now, developers are being asked to test their works-in-progress for vulnerabilities that could cost the business vast sums if exploited.

Yet, training for developers to deal with these new issues, and to use best practices to create software, still is lacking. "I can't believe I'm teaching remedial coding practices, when this is something new developers should have learned at a university," lamented Mary Ann Davidson, chief security officer at Oracle and a keynote speaker at the security summit.

Davidson pointed out that she's "the only non-civil engineer in my family," so she views IT as infrastructure, yet notes most are not built to the same standards of safety and reliability as physical infrastructures. "They use licensed engineers, and the work is checked by licensed, qualified inspectors." There is no equivalent in software development.

Another problem in dealing with software vulnerabilities, she said, is that there are no good automation tools addressing bad coding practices. "There

are beginning to be, as we move into second-generation security tools, because the early tools had 90 percent false positive rates."

It seems to me that companies should put as much effort into locating and stopping those who exploit their software as they do into trying to stay one step ahead of the hackers. Yet aside from Microsoft

## Industry Watch



and a few of its highly publicized cases, including that of a worm author who recently was made to pay restitution to Microsoft and do some non-computer-related community service, we don't hear much from companies working with law enforcement officials to try to stop hacking.

Davidson said this is so for a few reasons. First, it's often difficult to locate the perpetrator of these attacks, as computer networks offer such remote access that it almost would be easier at this point to locate someone in the mountainous caves of Afghanistan than it would be to find the creator and perpetrator of a computer worm or virus.

Second, and perhaps more important, companies are often reluctant to go public with the fact that they've been attacked, for fear of losing the confidence of their customers or end users, and also for fear that the admission might actually prompt even more attacks on the system.

Perhaps the biggest part of the problem is with the way companies find out about and are forced to resolve their vulnerabilities. Often, companies rely on independent hackers to bring problems to their attention. On the surface of things, that's fine. But Davidson said that, too often, these hackers effectively blackmail the software creators, saying if you don't fix this in X number of days, they'll make the vulnerability public.

When this happens, a company is forced out of its usual process of iterating its software to deal with that problem first, even if the company privately knows there is another, more damaging problem lurking. When you get blackmailed, you have to fix that problem first, because it's the blabbing that increases the risk to the organization.

"These people don't understand what 'fix' means from a customer standpoint," Davidson said. "Customers don't want multiple patches thrown at them on a haphazard schedule" every time a vulnerability is discovered. And, she noted, they don't want patches coming at them when they're trying to close their books for the quarter, because they won't be doing maintenance at that time. "The fix has to be tested and documented, and products often depend on other products, so you have to know how many versions of the product must get the fix, and for which operating systems, and then they all must be tested. For hackers to say, 'If you don't do it in a certain time frame, I'll blab' is a problem."

This method of catching problems evolved because companies at first were not responsive to people who said there was a problem with the software, Davidson said. So these independent "researchers" felt they were doing a good thing by prodding companies to make fixes. But the blackmail, and distribution of exploits, she said, "is like someone taking knowledge of the atomic bomb, putting it in 'Dick and Jane' form, and distributing to people who aren't always well intentioned."

Companies can begin to take a bite out of this kind of crime by learning and employing best coding practices, and by employing their own hackers to test their code for vulnerabilities, limiting the exposure to those who might try to hold a company hostage for notoriety, a job or even money. There's just too much at stake. ■

David Rubinstein is editor of SD Times.

## BUSINESS BRIEFS

**Oracle** last month announced it has completed the acquisition of identity management software company **Oblivex**. Oblivex's technology complements the identity and access management solutions available in Oracle Identity Management and included as part of Oracle Application Server 10g, the company said. Oracle will continue to offer the Oblivex COREid, SHAREid and COREsv products in stand-alone versions and will build some of the features into a broader identity infrastructure offering, the company announced. . . . **Microsoft** has accepted the terms of a settlement with the European Commission that will result in Windows XP Home Edition N, a version of the company's operating system that does not include Windows Media Player. Microsoft has agreed to remove all statements from its packages and documents that say certain programs won't work with the new version of the operating system, and to create a software package that allows the restoration of the Media Player if users so desire. There also will be a Windows XP Professional N version of the system. The agreement is part of the company's compliance with antitrust sanctions imposed last year on behalf of European Union members. The European Commission ruled in May that Microsoft took advantage of its desktop market dominance to gain an edge in other areas, such as media players. . . . IT research and consulting firm **Meta Group** reportedly laid off more than 10 percent of its staff in

advance of a merger with **Gartner**, according to industry sources. More than 250 analysts and consultants had been employed there; the source reportedly indicated that most of those kept on are based in Europe, where Gartner is looking to increase its business. The merger, which was approved by Meta shareholders last month, is expected to close this month.

**EARNINGS:** For its fiscal third quarter 2005 ended Feb. 25, handheld device manufacturer **palmOne** reported revenue of US\$285.3 million, an increase of about 18 percent over the same period a year earlier. Net GAAP income was \$4.4 million, or 9 cents per share. Last year for the same quarter, the company posted a loss of \$9.3 million, or 20 cents per share. The company cited strong sales of Treo smartphones, which it said rose 50 percent year-on-year. . . . **Oracle** announced revenue of US\$2.34 billion for the third quarter, resulting in GAAP earnings of 10 cents per share. GAAP net income for the quarter was \$540 million. New database license revenue for the quarter was \$782 million, the company said. Oracle cited IDC research numbers that show Oracle's share of the database market growing in the past 12 months from 40.3 percent to 41.3 percent, while **IBM's** share fell from 31.8 percent to 30.6 percent over the same period. ■

## CALENDAR OF EVENTS

**Gartner Application Integration and Web Services Summit** April 18-20  
Los Angeles  
GARTNER  
www.4.gartner.com/2\_events/conferences/apn14.jsp

**MySQL Users Conference** April 18-21  
Santa Clara  
MYSQL AND O'REILLY MEDIA  
www.mysqluc.com

**Linux on Wall Street** April 20  
New York  
FLAGG MANAGEMENT & LIGHTHOUSE PARTNERS  
www.linuxonwallstreet.com

**WinHEC** April 25-27  
Seattle  
MICROSOFT  
www.microsoft.com/whdc/winhec

**Windows Driver DevCon** April 25-28  
Seattle  
MICROSOFT  
www.microsoft.com/whdc/driverdevcon

**ASNApalooza (RPG Conference)** April 27-29  
San Antonio  
ASNA  
palooza.asna.com

**Microsoft Mobile & Embedded DevCon** May 9-12  
Las Vegas  
MICROSOFT  
www.medc2005.com

**Gartner Symposium/ITxpo** May 15-19  
San Francisco  
GARTNER  
www.4.gartner.com/2\_events/symposium/2005/spg7.jsp

**StarEast Software Testing Conference** May 16-20  
Orlando, Fla.  
SOFTWARE QUALITY ENGINEERING  
www.sqe.com/stareast

**Enterprise Architecture Summit** May 22-24  
Key Biscayne, Fla.  
FAWCETTE TECHNICAL PUBLICATIONS  
www.ftponline.com/conferences/eas/2005

**Wind River 2005 Worldwide User Conference** May 22-25  
Orlando, Fla.  
WIND RIVER  
www.windriverevents.com/userconference05

**IBM Rational Software Development Conference** May 22-26  
Las Vegas  
IBM  
www-306.ibm.com/software/rational/events/rsdc2005

**IDUG 2005** May 22-26  
Denver  
INTERNATIONAL DB2 USERS GROUP  
conferences.idug.org/namerica/2005

For a more complete calendar of U.S. software development events, see [www.bzmedia.com/calendar](http://www.bzmedia.com/calendar). Information is subject to change. Send news about upcoming events to [events@bzmedia.com](mailto:events@bzmedia.com).

## BZ MEDIA WEB SEMINARS

**Technology Boost Alert: Taking Data Modeling To the Next Level** May 11  
Time: 10 a.m. Pacific (1 p.m. Eastern)  
SYBASE AND SD TIMES  
www.bzmedia.com/webseminar

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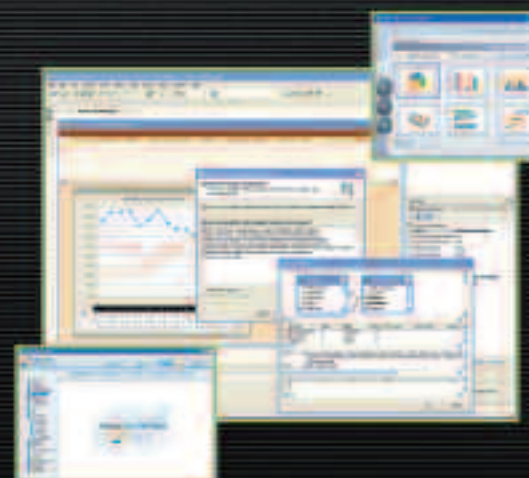
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